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ABSTRACT

The report describes the development and evaluation of an in-unit, leadership/management training program (based on experimental training methodology for providing Army leaders with behavioral skills and techniques) implemented within three battalion-sized combat units at Fort Bliss, Texas, in 1974. The program was organized around workshops designed to train leaders in individual and group problem-solving, management by objectives, and performance management. To evaluate the effect of the training, two survey instruments (an organizational climate survey and a skill use inventory) were developed. Seventy-six of the 92 key leaders trained were interviewed 2 to 12 months after the 60 hours of training was completed. In general, all of the participants accepted the training content as leadership/management skills useful to the Army leader in obtaining organizational goals. Over two-thirds estimated that they had increased their on-the-job use of the workshop skills and were able to identify positive consequences. Results of the project showed no conclusive evidence with respect to hard data (unit performance), but the soft data (estimates of the effects of skill use on-the-job) suggest that with the removal of several operational obstacles the training program could prove effective on unit performance and organizational climate. (Author/JR)

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Development, Implementation, and Evaluation of Leadership/Management Training Within Army Battalions

Vol. I Summary of Findings

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This report describes the development and evaluation of an experiential-based, leadership/management training program that was implemented within three battalion-sized combat units at Fort Bliss, Texas, in 1974. The project was part of a Headquarters, Department of the Army experimental Motivational Development Program which was conducted from 1972-75. Results were consistent with previous research findings; that is, attitudinal data was positive, but "hard" data, such as performance improvement was inconclusive.

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SUMMARY AND CONCLUSIONS

PURPOSE

Present Army leadership/management training over-emphasizes theory, traits, and book learning. In addition, formal school training is usually too far removed in time and specificity from the leader's job situation for transfer of training to survive. Thus, Army leaders have been forced, too frequently, to learn to supervise by trial and error. In response to these needs, an in-unit, leadership/management training program based on experiential training methodology was developed to provide Army leaders with behavioral skills and techniques. The training program was part of a Headquarters, Department of the Army experimental Motivational Development Program which was conducted from 1972-75. The program had three objectives:

1. to train key leaders of three different battalion-sized units at Fort Bliss in the concepts, principles, and techniques of three leadership/management "disciplines": Individual and Group Problem-Solving, Management by Objectives, and Performance Management;

2. to provide follow-on consultation; and

3. to evaluate the training and consultation in terms of acquired knowledges and skills, attitudes, command indicators, performance of missions, and potential for implementation in other Army units.

APPROACH

Four workshops were developed to implement the training program. Three of the workshops contained separate student and instructor manuals for each of the "disciplines" above. The fourth workshop was a special combination of the three "disciplines" for junior NCOs. One goal was to enable unit personnel to train other leaders within the units so that a self-renewing training capability would exist after the research had been completed.

Participating leaders acquired specific skills that could be used to solve on-the-job "people" problems by applying them in simulated problem situations using role-playing. The role-playing situations were quite structured: specific skills had been identified for specific conditions and situations. Thus, participants were required to identify the conditions of the problem situation, select appropriate skills and use them. Since they made mistakes, a

structured feedback or debriefing session was held after each simulated problem situation. Videotape "instant replay" was used to focus on specific behaviors and their consequences.

To evaluate the effect of the training, two survey instruments were developed: "Organizational Climate Survey" and "Skill Use Inventory." Also, routine command indicators were collected monthly. Currently, criteria used to measure organizational training effects can be classified as primarily attitudinal in nature. Here, it was possible to measure behavioral skill use to assess training effects, as skill use was related directly to the training objectives.

RESULTS

Seventy-six of the 92 key leaders trained were interviewed 2-12 months after the 60 hours of training was completed. In general, all of these participants accepted the training content as leadership/management skills useful to the Army leader in obtaining organizational goals. Over two-thirds estimated that they had increased their on-the-job use of the workshop skills and were able to identify positive consequences.

Management by Objectives was implemented only by individual leaders, since unit commanders did not take part in the training program. Performance Management (reinforcement) techniques were seen as being more useful to junior leaders than senior leaders. Individual and Group Problem-solving skills were seen as useful across all ranks and levels.

Analyses of data from survey instruments and unit performance measures showed insignificant ($p \leq .05$) differences between experimental units and control units. Although the training program produced no effect on measures of Organizational Climate or Skill Use, a moderately strong correlation was found between measures of Organizational Climate and measures of Skill Use. Insufficient data were produced during the project to discern any trends in unit performance indicators.

CONCLUSIONS

Results of this particular project showed no conclusive evidence with respect to "hard" data (e.g., unit performance). On the other hand, "soft" data (estimates of the effects of skill use on-the-job) suggest that with the removal of several operational obstacles the training program could prove to have an effect on unit performance and organizational climate.

Evaluation of the SKIM leadership/management training package indicates that it was well received by participants, but did not have the impact as expected on unit-wide measures. Several factors seem to account for these somewhat contradictory results.

1. Since unit commanders did not participate in the training, they did not initiate any command emphasis nor commit scarce resources to promoting and reinforcing the use of SKIM concepts and skills throughout their unit. Although positive feedback later convinced them to voluntarily initiate the training of junior NCOs, routine change of command was imminent and momentum to initiate the establishment of an in-unit SKIM training capability was lost. In addition, MBO was never given a chance to operate as a unit-wide management system.

2. Since the units were engaged in combat training, spending up to 60% of their time in the field and routinely reacting to orders from higher headquarters, programs associated with group problem-solving, performance management and MBO were difficult, if not impossible, to carry out as planned.

3. Survey feedback, a valuable means of motivating participants to use SKIM skills, was not available until very late in the project.

4. Follow on consultation with participants on current unit problems, another valuable means of motivating them to use SKIM skills, was not possible due to research staff time being devoted to higher priority tasks, such as collecting interview data.

5. Even if the above factors had been positive the time interval between training and the conclusion of evaluation may have been too short to produce positive results (it was at most 7 months for Unit B and 4 months for Unit C). Typically, human relations training takes at least 2 years of sustained effort to produce significant improvement in performance.

Although two of the above factors, survey feedback and follow on consultation, lie outside of the focus of the SKIM training package, they are, at the same time, viewed by Organizational Development (OD) researchers as essential to achieving measurable organizational change. It appears that the SKIM training package, implemented without such critical factors, was overly ambitious. However, the interview data does indicate that the SKIM training package would be a valuable addition to OD efforts within the Army. Positive outcomes of the training are as follows:

1. The training content (e.g., participative management) was accepted by all participants (by most, enthusiastically) and viewed as useful leadership/management skills for all levels of Army leaders in attaining unit goals.

2. Its 60 hour, behavioral-based, leadership/management training package is designed specifically for TO&E battalion-sized unit implementation. Its 4 student manuals and 4 instructor manuals contain examples drawn from real life experiences of Army leaders at all levels in combat units.

3. The experiential "hands on" instructional methodology (including student manuals) enabled participants to acquire SKIM skills efficiently and effectively. Participants were able to demonstrate competence in using SKIM skills at the end of each workshop. Further, by testing out the skills in simulated problem situations, participants were able to convince themselves that controversial leadership skills such as facilitating group problem solving meetings, were useful and appropriate (even for 1SGs). Later testing on the job confirmed these classroom views for over 80% of the participants.

4. Several unit leaders were able to effectively train their junior NCOs in SKIM skills. Junior NCOs were very enthusiastic about being able to acquire useful leadership/management skills, especially in how to motivate subordinates by leading them rather than pushing them.

5. The in-unit training approach was shown to be an appropriate one for acquiring leadership/management skills as it enabled participants to immediately try out the skills with their subordinates to resolve current unit problems. Transfer of training was obtained for at least 80% of the participants.

6. Two thirds of the participants felt that SKIM leadership/management skills had helped them to improve their subordinates' performance. A similar percentage of participants stated that they had noted a payoff for their unit as a result of SKIM training.

7. No negative outcomes were observed. This fact is noteworthy as it is not uncommon for OD efforts to cause performance to drop during the first year of implementation.

In summary, the results of the SKIM training package in terms of participant accomplishments, enthusiasm, and estimated skill use and payoff were quite positive. Comparison with a lack of impact on measures of unit-wide effectiveness strongly suggest that future

research efforts merge the SKIM training within full OD efforts. Moderately high correlations found between measures of SKIM "skill use" and "organizational climate" indicate that if the leadership/ management skills taught in the SKIM workshops are consistently applied on the job by all unit leaders (analogous to a critical mass), then desired OD outcomes can be realized.

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PREFACE

HumRRO Work Unit SKIM was initiated in 1973 to develop an in-unit leadership/management training program based on experiential training metnodology and to evaluate its impact in three battalion-sized combat units at Fort Bliss.

Work Unit SKIM was conducted by HumRRO Western Division at Fort Bliss, Texas, with Dr. Howard H. McFann as Director. Dr. Robert D. Baldwin is the Associate Director at Fort Bliss. Dr. John P. Fry is the Work Unit Leader. The evaluation portion of the Work Unit was conducted by Mr. Robert E. Cliborn. The work was conducted under the sponsorship of the US Army Research Institute for the Behavioral and Social Sciences, with Dr. Aaron Hyman, Chief, Team Performance Enhancement Division, serving as the Contracting Officer Technical Representative.

The Work Unit was part of a Headquarters, Department of the Army experimental MOTIVATIONAL DEVELOPMENT PROGRAM which was conducted from 1972-75. The purpose of this program, which was sponsored by the Office of the Deputy Chief of Staff for Personnel, was to examine the applicability of Organizational Development (OD) techniques for improving leadership and management practices in a variety of Army organizations. Inquiries on this program should be directed to the Director of Human Resources Development, Headquarters, Department of the Army, ATTN: DAPE-HRL, Washington, DC, 20310 or Commander, US Army ADMINCEN, ATTN: PACDA-HRD, Fort Benjamin Harrison, IN 46249.

Administrative and logistical support for the study was provided by the US Army Research Institute Field Unit, Fort Bliss, whose Chief is LTC Frank D. Lawler.

The Work Unit extended over a two-year period of time and a number of people contributed to its development and evaluation.

Assisting in development of the workshops were Mrs. Susan M. Larson, Mr. Justice S. Parazo, Dr. Paul G. Whitmore, Dr. William H. Melching, PFC Michael R. Hagerty, SP4 Michael C. Hilgenberg, SP4 Michael P. McQuinn, Mr. Robert J. Foskett, and Mr. Jimmy A. Wilson.

Assisting in conduct of the workshops were Mrs. Susan M. Larson, Mr. Justice S. Parazo, and SP4 Michael P. McQuinn.

Assisting in the evaluation of the training were 1LT John K. Hawley--initiation and development of instrumentation, SP5 Charles M. Dunn and SP5 Warren R. Allen--data collection and reduction, SP5 Nadean R. Jones and SP5 Christine K. Fischer--development and implementation of a feedback system.

HumRRO research for the Department of the Army is conducted for Work Unit SKIM under Army Contract DAHC19-73-C-0004. Army Training Research is conducted under Army Project 2Q763731A770.

Meredith P. Crawford
President
Human Resources Research Organization

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INTRODUCTION

Recent reports, especially from the CONARC Leadership Board, have pinpointed the need for more effective motivation and leadership practices in the Army (1, 2, 3). The new revision of FM 22-100, the new FM 22-101, and MAPTOE contains reference to how Army leaders should be leading their men (4, 5, 6). However, training designed to translate such concepts into skills and techniques has been ineffective. Present leadership/management training over-emphasizes theory, traits, and book learning, whereas effective leadership/management requires application not of information out of behavioral skills. In addition, formal school training is usually too far removed in time and specificity from the leader's job situation for transfer of training to survive. Thus, Army leaders have been forced, too frequently, to learn to supervise by trial and error. As a result, they find themselves limited in dealing effectively with "people" problems, especially problems related to motivation of subordinates.

In response to these needs, the development of an in-unit, leadership/management training program was initiated by HumRRO in July 1973, under the sponsorship of the Army Research Institute for the Behavioral & Social Sciences. The Work Unit "Organizational Management Skill Development" (SKIM) had the following objective: To train key leaders of three different battalion-sized units at Fort Bliss in the concepts, principles, and techniques of three leadership/management disciplines: Individual and Group Problem-Solving, Management by Objectives (MBO), and Performance Management; to provide follow-on consultation; and to evaluate the training and consultation in terms of acquired knowledges and skills, attitudes, command indicators, performance of missions, and potential for implementation in other Army units.

History

This project grew out of earlier work performed by HumRRO for CONARC under Work Unit SKYGUARD and later Work Unit MODMAN. In 1971, to demonstrate experiential instructional techniques, HumRRO developed a 40-hour performance-based leadership workshop for the faculty of the Air Defense School. The content (group problem-solving skills), however, turned out to be of greater interest. In 1972, by request of the Fort Bliss Modern Volunteer Army Office, the workshop was further developed to emphasize performance counseling skills. Two documents were later published by the U.S. Army Air Defense Center and School: "Student Manual--Performance Counseling Program" and "Instructor Manual--Performance Counseling Program" (7, 8).

In anticipation of the research project reported here, the then Fort Bliss Commanding General, LTG R. L. Shoemaker, funded, under Work Unit PREMOD, the initial development of two related leadership/management workshops: "Performance Management" and "Management by Objectives". The research reported here was initiated in July 1973 as part of a Headquarters, Department of the Army experimental Motivational Development Program which was conducted from 1972-75. The Motivational Development Program originated within the Office of the Special Assistant for Training (OSAT). Later, it became one of the major programs of the Human Resources Development Directorate, Deputy Chief of Staff for Personnel (ODCSPER). Work Unit SKIM was one of six Motivational Development pilot projects which were begun in 1973, each emphasizing a different approach toward implementing and evaluating a relatively new set of leadership and management techniques. Generally, these programs were designed to improve organizational effectiveness by increasing the motivation, morale, esprit, and teamwork of personnel at all levels (2).

The overall objectives of these techniques were to:

a. Strengthen the chain of command through decentralized decision-making and open channels of communication.

b. Develop improved leadership abilities in junior officers and non-commissioned officers (NCOs).

c. Develop job and career satisfaction designed to retain quality personnel.

d. Train leaders to conduct meaningful individual counseling.

e. Improve unit effectiveness.

General Hypothesis

The research reported here is based on the general hypothesis that improvement in the operational performance of any Army unit is directly related to the behavioral competencies of its leaders. In other words, the more competent unit leaders are in leadership/management skills and techniques, the more effective the operational performance of the unit and the higher the morale and job satisfaction of its soldiers will be.

Overview

The body of this report is divided into two major parts: training and evaluation. Each part will contain a method section, a results section, and a discussion section. A final discussion section will summarize and compare results from both parts. This division is a natural one as early in the project training and evaluation were headed by different HumRRO researchers. The intent was to keep the evaluation portion of the project as independent as possible of the training portion.

TRAINING

METHOD

This section describes the training content, the training methodology, the experimental design, the subjects, and training related activities.

Training Content

The SKIM training program consisted of three inter-related workshops:

(1) Individual and Group Problem-Solving,
(2) Management by Objectives, and
(3) Performance Management.*

Each workshop, alone, provides the Army leader with specific skills in an essential "discipline" of leadership/management. The skills in each skill area have been thoroughly tested separately in industrial, business, and school systems. Lately, where they have been put into practice together, their effectiveness in developing competent leaders has been very encouraging (10, 11, 12). Since the Army is a different system, however, with conditions unique only to it, each workshop had to be tailored to fit the Army environment.

Individual and Group Problem-Solving skills enable leaders to more effectively utilize their subordinates, staffs, and/or peers in the obtaining of solutions which are high in both quality and

*What is termed here, for military purposes, "Performance Management" is called "Contingency Management" in psychological literature.

acceptance. The skills can be applied at two levels: with groups or with individuals. The latter is called performance counseling.

When solutions are found, action is planned according to Management by Objectives (MBO) criteria. MBO skills enable leaders to set goals and objectives which are mutually acceptable. Expectations are clear since actions, standards and conditions are clearly stated.

As solutions are being implemented, Performance Management techniques enable leaders to systematically use social reinforcement and accurate feedback to obtain voluntary and self-motivated subordinate behavior. Performance management techniques replace, in most cases, the need to use punishment or threats. Instead of "pushing" subordinates and causing unwanted consequences, performance management techniques enable leaders to "lead" subordinates into initiating performance improvement on their own.

Although problem-solving is recognized as the basic function of the leader/manager, if he knows how to facilitate his subordinates' problem-solving and objective-setting ability, he gains not only better solutions but greater commitment in getting the job accomplished. Moreover, if he reinforces progress toward stated objectives, he guarantees motivation and further problem-solving if needed. Thus, the three "disciplines" can be conceptualized as three parts of a repetitive cycle.

A fuller discussion of the content of each workshop is contained in Appendix A. For a detailed discussion, student manuals for the three workshops, which were developed especially for Army leaders, are available (13, 14, 15).

Flexibility. The purpose of the training was not to teach participants "one best way" to lead or manage subordinates, but rather to help participants acquire a variety of effective behaviors for systematic handling and solving of "people problems". In other words, skills or behaviors offered in the workshops were designed to broaden or extend the participant's repertoire of behavioral skills--enabling him to increase his flexibility--by having him become more competent in the use of skills which he may have used before (but very infrequently or incompetently) or not at all. Since leadership/management is so complex, there is usually considerable room for improvement.

Instructional Methodology

In 1971, the Army initiated the Leadership for Professionals program to help upgrade leadership/management within the Army. This Army-wide program made it clear to participants that they should be doing things differently to be more effective in influencing and motivating their subordinates, but no model to demonstrate appropriate examples of behavior in specific interpersonal situations was presented. If behaviors were discussed, they were too general for participants to adapt to specific on-the-job situations.

In part, Work Unit SKIM was designed to follow the Leadership for Professionals program with a training program where participants could practice specific behaviors which had been identified to be effective in a variety of supervisory situations. To maximize the transfer of the behaviors from training to on-the-job situations, even ones that cannot be specified with certainty, an experiential training methodology was employed.

Currently, most leadership/management training is based on a traditional information-processing model where the instructor lectures and students learn principles; but there is no application of them. The emphasis is on cognitive learning. From a practical point of view, learning is incomplete. Moreover, the learner is passive and motivation to learn is low (16).

In contrast, an experiential model asks students to take action in simulated situations, note consequences, derive principles, and take action again. Motivation to learn is high as feedback is real and immediate. Experiential learning is an especially useful method for training skills in areas like leadership and supervision where a high degree of uncertainty exists; specific solutions cannot be known a priori since each problem situation is different (17).

Learning about new concepts or forming new attitudes may not result in new behaviors being used. For example, Army leaders can be convinced, intellectually, that they ought to listen to their subordinates and involve them in participative problem-solving, but they will fail to do so. This is because they have not experienced the positive consequences of using alternative leadership techniques.

It follows that training programs which attempt to have leaders acquire additional or alternative leadership/management skills for use in on-the-job situations, must be designed so that the skills are used by the learner in the active solving of training problems very similar to those found in real-life military assignments. As such, the instructor is not concerned with providing answers or

"school" solutions to the learner but rather with providing him with repeated skill practice in a variety of simulated problem situations. By role-playing the learner can experiment with new techniques, make mistakes, and learn from them through experience and immediate feedback without fear of embarrassment or inappropriate evaluation.

Thus, during the first phase of this research project, three "experiential" based workshops which would be suitable for training Army leaders were developed and refined. Each workshop included the following features:

A Self-Instructional Student Manual which specified learning objectives and explained specific skills which were to be acquired in clear terms, through the use of examples tailored to the Army leader's work situation (13, 14, 15).

A Functional Context. The student manuals were mainly used to introduce skills and to summarize them for students after they have been acquired in class. Thus, theory and principles were brought in when students are ready for them, not before.

A Small Group Setting. A small group setting (6-8 students) was used to utilize the resources of students and to reduce the risk of making mistakes when experimenting with new behaviors. Immediate feedback and reinforcement of appropriate behaviors and corrective feedback of inappropriate behaviors from peers can be easily accepted in such a setting.

Mastery. Evaluation focused on mastery of skills rather than on norms or relative standings of students. Students were reinforced for cooperative help in acquiring specific skills.

Use of Simulated Problem Situations. Simulation was used as a general technique for modeling specific behaviors in complex, real-life situations. By the actual practice of new ways of responding to situations which are typical of real-life, role-playing exercises are most effective in extinguishing old, inappropriate responses and establishing new, appropriate responses. Since participants experienced immediately the consequences of using the new skills and techniques, they "sold" themselves that the skills "worked". The impetus to use the techniques on-the-job followed naturally from such experience.

The problem situations which were used were derived from actual critical incidents that happened to job incumbents. Thus, problem situations provided realism, occurred commonly on-the-job, and varied in complexity from the very short and simple to the more difficult and complex.

Videotape recording was also used extensively. Its "instant replay" capability enabled students to see for themselves what they were or were not doing that was appropriate or inappropriate for the situations.

Emphasis on Structured Debriefings. Each simulated problem exercise was followed by a structured debriefing or discussion period where objective, behavioral feedback was obtained from peers. Each debriefing was at least as long as its simulation exercise.

In summary, the goal of the training was for students to acquire specific skills which could be used to solve "people" problems on-the-job. To accomplish this goal, students were asked to try out the skills by role-playing them in simulated problem situations. Unlike other settings, role-playing was quite structured: specific skills had been identified for specific conditions and situations. Thus, students were required to identify the critical conditions in the problem situation, select appropriate skills, and use them. Since students made mistakes, a structured feedback or debriefing session was held after each simulated problem situation to focus on the consequences of the use or misuse of the skills. Peer feedback, aided through behavior checklists and videotape "instant replay", was emphasized. Transfer of techniques to on-the-job situations was the terminal instructional goal.

Supporting Research. The experiential training approach employed was based on research in applied settings. Recently, Goldstein and Sorcher (10), for example, have compiled a body of research evidence which supports an instructional approach for changing supervisor behavior which is very similar to that used in this project. In brief, they concluded that the acquisition of knowledge through cognitive processes is insufficient; knowledge must be translated into the experience of the learner. Isolated information and principles are typically "pigeonholed" or converted to abstractions. In contrast, information and principles which are applied change the learner's behavior even though he may go to great lengths to preserve old habits. In addition, Goldstein and Sorcher state that,

> Contrary to the opinion of many, the evidence shows clearly that attempts to change attitudes or behaviors by means of verbal persuasion and logical explanations rarely succeed. A major roadblock to attitude or behavior change is the existence of defense mechanisms which spring into operation when one's customary beliefs are threatened. (p. 5)

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They emphasize that how to overcome this reluctance to change behavior is tied to how people learn--through imitation, practice, and reinforcement of appropriate behaviors. They list four components of behavioral learning, each of which is shown to be necessary, yet insufficient by itself:

1. Modeling. Supervisor-trainers are shown films or videotapes of supervisor and employees interacting in effective ways in problem situations. (Modeling provides the "what".)

2. Role-playing. Supervisor-trainers repeatedly practice and rehearse specific behaviors which were demonstrated by the models. (Role-playing provides the "how".)

3. Social Reinforcement. As supervisor-trainees role-play behaviors which become more and more similar to the model's, they are provided with appropriate reinforcement and feedback by both the instructor and other trainees. (Social reinforcement provides the "motivation".)

4. Transfer of Training. The above three components are combined to focus on progressively more difficult problem situations so that transfer of newly-acquired skills from the classroom to the job setting is optimized. (Transfer of training provides the "practical experience".)

Modeling. Modeling is a common way for Army leaders to acquire leadership/management skills. However, even if the model they choose (e.g., a leader senior to them) displays all productive behaviors, trial and error learning is still required. Instead, participants in this training were presented with well-researched behavioral skills, known to be effective in a variety of leadership/management situations. A videotape of examples of correct and incorrect behaviors was developed for one of the workshops. In other workshops, behaviors were presented in the manuals and demonstrated for participants.

Role-playing. Role-playing is especially suited to leadership training because it is capable of vividly portraying the dynamics and behavioral cues of human interaction.

Role-playing enabled all members of each training group to observe, experience and practice actual behavior in contexts which were close to reality. Analysis was concerned with actual behavior--not just concepts. Generalizations and principles were tested in action as participants tried out new skills. Learning was experiential; that is, it grew out of experience, not just talk.

Social Reinforcement. Reinforcement of the use of appropriate behaviors in role-playing and critique of inappropriate behaviors by other workshop participants (peers) provided a powerful motivational incentive to change behavior.

Transfer of Training. Transfer of training from the classroom to the job is crucial. Since practice took place in problem situations which approximated real-life situations, transfer was enhanced. Real problems, currently faced by participants, were role-played in the classroom during the latter portion of the first workshop and continued in subsequent workshops. To practice skills in situations very close to reality, subordinates of participants were even brought into the classroom on occasion. Since reinforcement and feedback from peers helps to legitimatize and internalize skill usage, participants were asked to provide feedback and reinforce each other on-the-job whenever they "caught" each other displaying workshop behaviors. Thus, an attempt was made to ensure continued skill use through extrinsic reinforcement, in addition to the intrinsic reinforcement derived from positive results of using the skills on-the-job.

Supporting Conditions. Olmstead (18) has recently summarized the research on small group instruction. He concluded that learning new behaviors is difficult unless certain instructional conditions are met. For example, just the suggestion that there is an intent to change leadership behavior is usually perceived as a threat by the learner. Training implies that he is deficient in some way. If the learner is not allowed to experiment with new behaviors, discuss his fears, test out behaviors for himself through role-playing, he will usually reject the new information and avoid using it. Further, learning new behaviors implies that failure may occur. In fact, since behavioral skills are often difficult to learn, the learner is bound to make mistakes. A small group setting with no grading and no access by outsiders provided the necessary low-risk environment.

Olmstead also concluded that skills in coping with unique situations are best developed when students are exposed to numerous problems which are sufficiently different to require a variety of responses. The role-playing of skills in a variety of situations enabled leaders to develop flexible and spontaneous responses to novel situations (just like real-life). In fact, since no situation to be role-played ever turned out the same, learners became equipped to cope with new and emergent situations as they occurred.

Comparison With Other Training Programs. The goal of leadership/management training programs is to change behavior. Most programs

can produce little evidence, however, to show that on-the-job behavior has been changed as a result of training (10). Usually this is because most training programs (e.g., awareness training, managerial grid, T-groups, or transactional analysis) use unstructured role-playing or abstract exercises to elicit participants' usual behaviors and then expect that discussion of these typical behaviors will give participants sufficient insight into their leadership/management style to cause them to change their behavior. In contrast, SKIM workshops focused on structured practice and rehearsal of specific behaviors through role-playing in problem situations which simulated on-the-job conditions as realistically as possible. If learners are not provided with models of specific behaviors which have been demonstrated to be effective in specific leadership/management situations, discussion of behavior becomes so general that transfer to on-the-job problem situations is difficult, if not impossible. To obtain transfer of specific behaviors from the classroom to the job, learners must practice them repeatedly in a variety of simple to complex situations until they feel competent and comfortable enough to risk using them on-the-job. Moreover, repeated practice guarantees that they won't be easily forgotten and that they will be linked to specific work-related problem situations, especially those where they are most likely to be effective.

Focus on Behavior. Most other training programs try to change behavior by changing attitudes first. This intent implies a personality or belief system change which is very difficult to achieve under any condition. In contrast, the focus of the SKIM workshops was on changing behavior first. Research evidence shows that if behavior can be changed first, and subsequently reinforced by others for its use, attitudes will eventually and naturally become consistent with the changed behavior (10). When behavior and attitudes (beliefs) are not in harmony, people usually seek to obtain consistency (19).

In-unit Training. Finally, the SKIM workshops were designed to be conducted while participants were assigned to regular TO&E units. Although such "in-unit" training takes up critical time, it enables participants to try out and practice their new skills immediately after (or even during) training. As a consequence, participants can be immediately reinforced for their efforts, both by unit leaders and by feedback from their subordinates and peers. Since school training is usually too far removed in time and specificity from the leader's situation, it cannot match this essential condition which contributes so much to transfer of skills from the classroom to routine on-the-job application.

Experimental Design

For generalizability of results, the experimental design originally called for the use of three different pairs of battalion-sized TO&E units at Fort Bliss. Each pair was to contain two units matched in terms of mission, size, and TO&E. Key leaders of one unit in each pair were to serve as participants in SKIM training, the leaders in the other matched unit were to serve as experimental controls. The three experimental units were to be trained in succession so that the training materials and procedures of the workshops could be developed and refined over time. In other words, it was planned at the outset that the workshops would be revised as the project progressed. In fact, participants were expected to help co-develop the materials so that they would fit the Army environment. Even the first workshop, Individual and Group Problem-Solving, which had been used to train over 250 Army officers at Fort Bliss before the project began needed revision. Its problem situations had become too Air Defense oriented.

Evaluation of the training used a time-series experimental design, the most appropriate one for measuring the effects of a training program of this nature:

Units	Before Training	Training	After Training
E (Experimental Unit):	T_1 T_2	X	T_3, T_4.....T_i
C (Control Unit):	T_1 T_2	---	T_3, T_4.....T_i

This design has the feature of allowing for pre- and post-training measurement and of being able to control for any outside variables or factors which may influence the units. In other words, the external environment of E should also be the same for C. This design also controls somewhat for interactions resulting from the introduction of the measurement instruments. The less threatening second test administration (T_2) should give a measurement closer to the unit's base level of functioning. Additionally, this design allows the monitoring of the functioning of the units over time, thus assessing any long range training effects.

It is well-known that current approaches toward the change of organizational effectiveness typically take several years of continuous implementation for any payoff to occur (20, 21). The innovative training-intensive, behavioral, approach taken here was based on the rationale that change, if any, would occur sooner but still not within a year. Thus, repeated measures over time are essential. NOTE:

With the routine turnover of unit commanders currently set at 18 months, any training program that could not produce results within that time frame would probably be of little interest to them.

The above experimental design represents what was proposed at the start of the research project. The discussion will now focus on what happened in the training portion of the project; evaluation will be discussed later.

Subjects

Training of an co-development with the first experimental unit was to begin in November 1973. Due to delays in obtaining troop support, however, only two pairs of matched units were finally included in the research program. In part, this was also because existing training schedules of candidate units did not permit them to begin training until June 1974 at the earliest.

Fortunately, the Commanding Officer of the 2nd BN/52n ADA(ELM) became interested in the program and volunteered his unit to become the first experimental unit. Unfortunately, this air defense unit was unique; its four line batteries were stationed on hard sites in Florida and its strength was half that of a normal battalion-sized unit. Therefore, the 2/52 had no counterpart to be used as an experimental control. However, since the research plan called for the first experimental unit to be used primarily as a developmental testbed for workshop materials, the unit offered an excellent opportunity to get the training and developmental portion of the project underway.

Official requests for troop support were honored by COL Montgomery T. Speir of 11th Air Defense Group and COL D. K. Doyle of the 3rd Armored Cavalry Regiment. These commanders selected the experimental and control units. Criteria were not made known to research personnel. Since the two squadrons chosen from the 3rd ACR were sister units, they were matched as closely as two units can be. In the 11th Group, however, there were no identical TO&E units available, but the 4th BN (C/V)(SP) 1st ADA, which uses Chaparral/Vulcan weaponry and the 2nd BN/55th ADA, which uses Hawk weaponry were fairly closely matched otherwise. Table 1 lists the characteristics of the five units involved in the project.

Personnel Trained. The experimental units were requested to schedule 30 of their key leaders for training. Table 2 shows that the units complied with this request fully. For example, 100% of the battery/troop commanders took part in the training. The only noteable exception was the absence of the commanding officers from Units B and C. This factor will be discussed later.

TABLE 1

Characteristics of Units Involved in Work Unit SKIM

Designation	Composition	Troop Strength	Mission	Commanding Officer
(E) 2rd BN/52nd ADA(ELM)	1 HQ & HQ Battery 8 Sections/Platoons	400+	Support of Annual Service Practics (ASPs) Field Tests, and FTXs; maintain TO&E equipment of line batteries	LTC Carl Widell LTC John D. Bloom (as of 12 Dec 74)
11th Air Defense Group				
(C) 2nd BN(NA) 55th ADA	1 HQ & HQ Battery 4 Towed Hawk Line Batteries	800	High and medium altitude air defense in field combat operations	LTC Noah Dinardo LTC Samuel J. Hayton (as of Nov 74)
(E) 4th BN(CV)(SP) 1st ADA (was 5th BN/59th ADA until October 74)	1 HQ & HQ Battery 2 Vulcan Batteries 2 Chaparral Batteries 1 118th Ord. Sec. (attached)	600	Low altitude air defense in field combat operations	LTC Gerald Holt LTC Peden (as of 2 Jun 75)
3rd Armored Cavalry Regiment				
(C) 1st Squadron	1 HQ & HQ Troop 3 Armored Cavalry Troops 1 Tank Company (M-60) 1 Howitzer Battery (109SP) 1 Aviation Section	1000	Provide security & reconnaissance for field units and to engage in offensive, defensive or delaying actions as an economy of force unit	LTC T. H. Tait
(E) 3rd Squadron	1 HQ & HQ Troop 3 Armored Cavalry Troops 1 Tank Company (M-60) 1 Howitzer Battery (109SP) 1 Aviation Section	1000	Provide security & reconnaissance for field units and to engage in offensive, defensive or delaying actions as an economy of force unit	LTC John J. Yeosock LTC John Crow (as of 20 Jan 75)

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TABLE 2

Unit Personnel Trained
by Position and Losses
as of 1 Apr 75

Unit / Position	Unit A		Unit B		Unit C		Combined		Combined Percentage Trained	Losses of trained personnel as of 1 April 1975		
	Assigned	Trained	Assigned	Trained	Assigned	Trained	Assigned	Trained		Unit A	Unit B	Unit C
BN/SQRN CMDR	1	1	1	0	1	0	3	1	33%	1	-	-
Exec Officer	1	1	1	1	1	1	3	3	100	-	-	-
CMD SGT-Major	1	1	1	1	1	1	3	3	100	-	1	-
Staff Officer	5	5	9	2	10	5	24	12	50	3	1	-
BTRY/Troop CMDR	1	1	6	6	5	5	12	12	100	1	-	-
Exec Officer	1	1	6	2	5	4	12	7	58	-	1	1
1st Sergeant	1	0	6	4	5	5	12	9	75	1	1	-
PLT LDR/Sec Chief	16	14	18	9	14	2	48	25	52	8	1	-
PLT SGT/Sec Leader	5	1	13	5	33	7	51	13	25	1	1	-
Staff NCO/Other	-	5	-	-	-	2	-	7	--	3	1	1
TOTAL		30		30		32		92		18	7	2

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Table 2 also indicates that the loss of trained leaders due to turnover has been reasonable, considering that training took place May-May 74 for Unit A, Jun-Aug 74 for Unit B, and Oct-Nov 74 for Unit C. Where possible, selection of participants for training was based on who would be remaining in the unit for longer periods of time.

Scheduling. Since instructors were flexible, the units were able to schedule SKIM training so as to interfere least with normal operations and mission accomplishment. The time required for each workshop is shown in Table 3.

TABLE 3

Time and Scheduling for the Workshops

Workshop	Approx. Time	Typical Scheduling
Ind. & Group Prob-Solving (I/GPS)	35 hrs	10 half days (or 5 full days)
Performance Management (PM)	15 hrs	5 half days
Management by Objectives (MBO)	10 hrs	3 half days
TOTAL	60 hrs	18 half days (or 9 full days)

The training consisted of the three workshops being presented in succession (I/GPS, PM, and then MBO) to groups of 7-8 participants each. Each group stayed together through the entire series. However, each unit chose a different scheduling format:

Unit A -- full days, workshops staggered over three months, no overlap among groups (one at a time)

Unit B -- half days, workshops staggered over two and one-half months, occasional overlap among groups

Unit C -- half days, workshops staggered over one and one-half months, complete overlap among the four groups (two in the morning, two in the afternoon)

Attendance. To a large extent, participants were permitted to skip classes (or workshops) if unscheduled unit activities appeared which were of higher priority. Since later classes consisted of repeated practice, regular attendance was desired, but not crucial.

On the average, about one participant per group was absent at any one time. The last workshop in the series, MBO, suffered scheduling problems due to unanticipated preparation for FTXs or attendance at a special honors ceremony. Many participants were put in an "approach-approach" conflict. They wanted to attend the workshops and do their job at the same time.

Credit. Upon completion of the 60 hours of training, participants were given DA "Certificates of Training" which specified the three workshops. A request for local college credit for participants was disapproved because the workshops were transitory and not available to non-military students.

Training Related Activities

Since training of the first unit did not begin until March 1974, the first eight months of the project were spent in development of the workshops and evaluation instruments. The two new workshops, Performance Management and Management by Objectives (MBO), were tested out several times on small groups of leaders who could be recruited from units other than those scheduled to be in the project. However, since these participants were mostly from different units, a true test of MBO was not possible. This redesign process was essential to the development of useful workshops and continued throughout the project until Unit C was to be trained. The workshops were felt to be in final form at that time. It should be noted that the project began as an exploratory and developmental effort and ended with a product ready for experimental evaluation. This means that only measurements on Unit C are free of the confounding "Hawthorne effects" of enlisting the participants of Unit A and B in co-developing the workshop materials. The goal of obtaining a viable training program outweighed the goal of obtaining valid measurement throughout the project until Unit C was trained, beginning in Oct 75.

Interviews/Feedback. After training, at least one contact (usually two) was made with each participant to ascertain his use of workshop skills on-the-job. Specially prepared "logs" on which to record information pertinent to problems attempted and solved had been given to all participants at the end of each workshop. For Unit B, these attempts were written up in a "Newsletter" and distributed to participants to provide them with feedback as to how others were using the workshop skills. The "Newsletter" was intended to provide unit-level practical tips, to reinforce those who were successful, and to "spur" those who had been reluctant to try their newly acquired skills.

Another reason for collecting anecdotal evidence grew out of the need to obtain realistic problems for the workshops. In addition, the information was feedback to the research staff as to how well the skills were paying off to participants.

While interviewing participants and obtaining feedback, the SKIM research staff asked if they could assist by serving as process consultants (observers of skill use) during problem-solving meetings. Most participants expressed little interest. They seemed capable of handling situations themselves or obtaining assistance from others in the unit who had also had SKIM training. Thus, although consulting/observation was discussed, only two cases, both in Unit A, were actually undertaken.

Survey Feedback. It was intended that results of the two survey instruments, "Skill Use Inventory" and "Organizational Climate Survey" (to be described below), would be used as feedback to participants in both the experimental and control units. Due to delays in reducing information from these instruments to useful summaries and the effort required to extract such information for each participant, only the commanders of Unit C and its control unit received such feedback before 1 Mar 75. In March, survey feedback was begun for each training participant in Unit C and control counterparts. Thus, for practical purposes, the results below represent the effect of only the training and follow-up interviews.

Development of an In-unit Training Capability. Project plans also called for the selection and training of appropriate unit leaders to serve as in-unit instructors for remaining leaders in the unit. The intent was to initiate an internally self-contained and self-renewing training capability within the unit, so that new leaders could be trained as turnover occurred. Since the costs of a professional training staff are prohibitive, the instructor manuals for the workshops were designed so that workshop graduates, with minimal training, would be able to instruct other unit leaders.

Due to the interests of the commander of Unit B in seeing his junior NCOs (E5, E6) trained in a shorter version of the SKIM workshop series, and because workshop graduates were heavily committed to mission tasks, the above plan was modified to focus on junior NCO training. Success with the modified plan, to be discussed next, indicates that a full in-unit SKIM training capability is feasible, if time and resources are made available.

Junior NCO Training. Since junior NCOs deal more often with counseling and motivation of subordinates, a special Junior NCO workshop, combining skills to perform these functions from the three SKIM

workshops, was developed. The content of the Student Manual includes skills of performance and personal counseling, setting performance objectives, and performance management (22). The Instructor Manual provides a step-by-step procedure for conducting the workshop (23).

Classroom instruction was set at 16 hours, with the assumption that lieutenants and senior NCOs, who had completed the SKIM series, would serve as co-instructors. After training, these co-instructors and other SKIM graduates in the unit were expected to follow up the training with on-the-job coaching and performance counseling. The purpose was to enable Junior NCOs to learn how to handle "people problems" under supervision/coaching instead of being shunted aside because they are too inexperienced and/or too immature. In addition, having SKIM graduates serve as co-instructors would legitimize use of the skills and enable subordinate leaders to contribute to maintaining their leader's use of them through feedback and the positive reinforcement from having solved problems together.

Five Junior NCO workshops were conducted for 27 junior NCOs (5-6 per workshop) in Units B and C, beginning in Oct 74. The schedule was basically about three hours per day over a five day period of time. Where co-instructors were made available from the units, they conducted the workshop. SKIM instructors provided back-up advice only.

RESULTS

This section first describes the attitudes of participants toward the workshops immediately after training. A discussion of the results of structured interviews with participants, 2-12 months after training, follows.

This information represents feedback from participants who were expected to contribute their ideas and suggestions toward the development and/or improvement of the SKIM training program. Participants were not required to use the skills they had acquired, but they were asked to try them out, voluntarily, and to report any difficulties they encountered. Because of their unique position, the information below, although subjective, represents the opinions of those who are best able to judge the value of the training program.

Results of Post-Training Attitude Surveys

Appendix B* presents results of Post-Training Attitude Surveys completed immediately after each workshop by participants of Units B and C (Unit A participants helped to write the questions).

Individual and Group Problem-Solving Workshop. All participants, except one, recommended this workshop for Army leaders. Eighty-five percent felt competent enough to use the skills on-the-job immediately. Fifty-eight percent indicated that they would like to train others.

When Army leaders first hear about "Group Problem-Solving" (GPS) they are usually concerned about loss of control. Item #13 indicates that only 15% of the respondents were still concerned about this issue after training. Items #21 and #22 verifies similar feelings toward loss of control and "command presence" when using GPS.

Item #24 indicates that 83% of the participants planned to use a problem-solving approach when performance counseling. The last two items indicate that participants' median expected rate of use of GPS on problems that they would face on-the-job was 40%, while their median expected rate of use of a problem-solving approach to performance counseling was about 75%. These estimates were up from 10% and 40%, respectively.

Although the questions asked were somewhat different, attitudes toward the Individual and Group Problem Solving Workshop expressed here are very similar to those expressed by over 250 Army leaders trained by HumRRO prior to Work Unit SKIM and 93 Navy leaders trained by personnel of the US Navy Human Resources Management Center, Norfolk, VA. HumRRO assisted in adapting the latter workshop to Navy terminology in 1974, otherwise it is virtually the same as the Army version.

Performance Management (PM) Workshop. All participants, save one, recommended this workshop for Army leaders. Sixty percent indicated that they would like to train others in PM. All but 15% felt sure that PM techniques would help them to improve performance of immediate subordinates. Eighty-nine percent felt that PM programs would provide a better way to motivate subordinates than threats or punishment. Items #14 and #15 indicate that participants' median expected rate of use of the basic skills of PM was 75%.

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*Appendices B through J are contained in a second volume entitled "Development, Implementation, and Evaluation of Leadership/Management Training Within Army Battalions. Volume II: Technical Appendices."

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Management by Objectives Workshop. Due to problems in scheduling (FTX preparation, honor guard commitment, Thanksgiving, etc.), there were only 34 participants at the end of this workshop. However, other participants did attend one or two sessions.

Of those who answered the survey, almost all (88%) recommended this workshop for Army leaders. Eighty-two percent felt that MBO provides an objective means of evaluating the performance of subordinates. Although 71% planned to use MBO with their subordinates, about 53% thought that MBO might take too much time. Almost half of the participants felt that they were already using MBO with their immediate subordinates. In fact, the median expected rate of use was not much greater than current practice, partly because current practice was already fairly high (the exception being the writing of performance objectives).

Junior NCO Workshop. All 27 participants recommended this workshop for other NCOs in their unit (78% strongly). Participants' median expected rate of use of a problem-solving approach to performance counseling and the basic skills of performance management was about 90% of the time, up from rates of 27.5% and 25%, respectively, before training.

Formal structured interviews were conducted with participants of the above three workshops. Results are presented in detail below. For the junior NCO workshops, however, only informal follow-up feedback was obtained. In general, participants in this workshop were very enthusiastic about what they had learned.

Representative comments and suggestions follow:

"My attitude has changed about 100% toward the workshop from when I started it."

"The workshop practical exercises and skill training results in learning specific skills."

"Now I don't have to take a hard core line to get a job done or a problem solved."

"I feel that this workshop is good for the new NCO; but for the older NCO, all that it seems to do is act as a refresher."

"This workshop needs to be mandatory; start at the top and get all top NCOs to come to it, too."

"The workshop is too short to make an impact on the 'system'. We need 40 hours instead of 16. Then it would be useful for promotion points and you'd get more volunteers and better attendance."

Most participants stated that they could have used at least eight more hours of classroom training, especially more time in practicing counseling skills--to build confidence and competence. Another request was for their leaders to put emphasis on using the skills on-the-job. In other words, they wanted reinforcement for taking the time and effort that was necessary to use the skills.

Full-time unit co-instructors, lieutenants who were SKIM graduates, were made available for three of the five junior NCO workshops. All three stated that being an instructor helped to sharpen their previously acquired skills. Further, they were able to follow up the training with coaching, counseling, and reinforcement; mainly because participants in their respective workshops were all from their own battery or troop. The two workshops without permanent unit co-instructors were composed of participants from different units, thus making follow-up coaching difficult.

All participants were instructed to use special "logs" on which to record their use of workshop skills. This helped to give direction to participants and also provide feedback to the research staff.

Structured Interview Data--Introduction

During January-March 1975, participants in the SKIM training were interviewed by research personnel. The purpose of the interviews was to collect information about current attitudes toward the training program and to collect estimates of current rate of on-the-job use of SKIM skills.

As the three units were trained at different times, the length of time between training and interviews ranged from 8-12 months for Unit A to 2-4 months for Unit C, with Unit B at 6-10 months.

The interviews were structured around questions which had been posed by participants themselves, by research personnel, and by possible projected needs of Army decision-makers who might wish to implement similar training throughout the Army.

Since the interview questions were written out, copies were mailed to the 19 participants who were no longer stationed at Fort Bliss. Of these, three returned their questionnaires, while four came back marked

"Return to sender". All participants stationed at Fort Bliss, in addition to two who were visiting at Fort Bliss, were interviewed. Table 4 presents the percent interviewed per unit.

TABLE 4

Percent of Participants Interviewed by Unit

Unit	Number Interviewed	Number Trained	% Interviewed
A	16	30	53%
B	28	30	93%
C	32	32	100%
	76	92	83%

Procedure. The interviews were conducted in private on a one-to-one basis. On the average, they took about 75 minutes to complete. Participants were asked to be as candid and frank as possible in their responses for two reasons:

(1) So that researchers would be able to pinpoint what parts of training needed to be improved and

(2) so that the Army would be able to determine if the training program was worthwhile.

In addition, it was made clear that all responses would be confidential and that names would not be linked to quoted responses.

The interviewers consisted of three research personnel who had also served as SKIM instructors. Although this choice may have introduced some positive bias, three reasons outweighed the use of others as interviewers:

(1) Instructors were the only personnel available who could knowledgeably and incisively follow-up on responses to the interview questions.

(2) Participants had a high degree of trust toward and familiarity with the instructors; they had gone through intensive learning experiences together where honesty and open feedback had been a basic "ground rule".

Further, the instructors were civilians who had already demonstrated that they would respect the confidentiality of any information they acquired.

(3) The interview also served as a consulting-type discussion. Participants expected the instructors to appear and ask questions like "How are you doing?", "What problems are you having?", "How can we help you?", and "Where do we go from here?" In other words, most participants looked forward to seeing the instructors again, both to relate their successes and failures and to obtain some reinforcement or encouragement. Thus the "set" for the interview was more of a relating of experiences and opinions for improvement than a formal evaluation of the program.

Nonetheless, the demand characteristics of being interviewed by instructors (researchers) should not be overlooked. Participants might have said to themselves "What do they want to hear?" or they might have made an effort to be consistent with their previous positive statements and behaviors. This latter point suggests that a "halo" effect could have been operating during the interview. Since participants (and their peers) had a generally positive attitude toward the training, all responses might have been biased in a positive direction.

The interview information obtained, however, indicates that participants did not have positive responses to all aspects of the program. Use of MBO and Performance Management programs was less frequent than expected--indicating a non-"Halo Effect" discrimination. In addition, some participants admitted that they were lazy or felt incompetent to use certain sets of skills--suggesting open and honest responses. In conclusion, the interviewers felt that participants were more honest and unbiased with them than they would have been with "neutral" interviewers.

Responses to Interview Questions. The responses below follow in the same order as used in the interview. The initial questions were easy to answer and were designed to get the participants "warmed up". In all cases, the quoted responses are representative of the total range of responses. They have been edited slightly to clarify the content.

1. Time Spent in Workshops

Since the three workshops required about 60 hours of training time, most of the participants' complaints about the workshops centered around "interference with job performance" in terms of time. Therefore, the first set of interview questions asked participants what they thought about the time spent and the scheduling.

Time. Most participants (69%) felt that the amount of time spent in all three workshops was acceptable, with minor exceptions. Ten individuals (13%) felt that they could have used more time, while twelve participants (16%) felt that the amount of time spent in most or all of the workshops was excessive. One individual felt that all three workshops were a waste of his time, while another individual said that he learned very little due to having a bad attitude because he was away from his work. Typical comments:

> "I feel that the time spent was necessary to get the ideas across and practice them."
>
> "At first, I was upset at being required to attend the workshops. But I soon found it was good information and that the time spent was worthwhile."
>
> "Tailor length of workshops to participants background and experience."
>
> "We could have used more time to discuss real unit problems."

Repetition. Most participants (85%) felt that some repetition over the three workshops was either okay or helpful in learning (as a refresher).

Training Schedule. Unit A chose to allow most of its participants (56%) to attend the workshops full days, on a TDY-type basis, where they were free from unit duties during the workshops. In contrast, only two participants from both other units were relieved from their duties. Of those who were expected to continue performing their regular jobs, over half (54%) acknowledged that this requirement hampered their learning and/or their job performance. Typical comments included:

> "I had my job on my mind during class, especially during inspections."
>
> "Instead of having time to read and review workshop materials, I was doing paperwork for the unit."

"Going to work after class was good because I could apply workshop skills on-the-job immediately."

Only 30% of the participants (from Units B and C) felt that the staggered or half day workshop schedule was acceptable (it enabled them to keep up with their unit work). Most (70%) however, felt that a full-day training schedule with a TDY-type release from their duties would be ideal for learning. Suggestions included:

"Present it like a regular course--a full eight-hour day, one workshop per month for three months, with time in between to use the skills."

"Ideally, take people out of the unit for two weeks. This is the best way to get training in and hold up the unit too. This worked in Europe pretty well."

"An hour and a half before and after lunch would be better." (1SGs especially liked this schedule.)

In-Unit Training. In general, most participants (76%) felt that in-unit (on-the-job) leadership/management training, like that they had experienced, was the best way to learn new leadership skills. The remainder (24%) felt that in-unit training was good, but steps ought to be taken to minimize the amount of time required. A common suggestion was to put the training program in Army schools and have refresher courses in the units. Other comments included:

"While in a unit, you can use the skills the next day on the job and report on what happened to the workshop group."

"It's probably the best way to train but hardest to free up people."

"I would prefer to see this training in basic and advanced courses, but you do lose immediate application."

"I'd like to see it done on a post-wide basis, then you could release people from duty and it wouldn't chew up a unit too much at one time."

2. Content of the Workshops

Participants rated the overall content of the workshops from "OK" to "excellent", with most ratings at "good". In general, performance counseling and group problem-solving were liked best. Comments of interest included:

"MBO is difficult to use, BN TO&E can't be changed. You need some response from higher HQ."

"Individual and group problem-solving was excellent. Performance management is good to get work out of people without hurting feelings. MBO is no different from Army methods."

"I use skills to fit the occasion; not exactly as stated in manuals."

"I'd like to see you compact the content into a pocket manual so we can refer to it constantly."

Readability. In reference to the readability of the manuals, only four participants reported any difficulty. One felt that the reading level was too high for NCOs. Another said he repeatedly misinterpreted words, but got straightened out in practical exercises. Typical comments:

"In relation to correspondence course material, these manuals were easy to read."

"The manuals were clear and easy to read, but there was too much material."

Content to Add. When asked if any other leadership/management skills should have been included in the workshops, participants suggested the following:

"How to deal with rating others would be helpful (OERs, EERs)."

"Combine SKIM and Race Relations. Race Relations tears apart but does not resolve problems."

Content to Delete. When asked which skills were of negligible value to them, 39% identified the following skill areas and some gave their reasons (frequencies are in parentheses):

a. Performance Counseling (3)
   --"Performance counseling is most useful, but hardest to implement."

b. Group problem-solving (7)
--"not needed at my level in unit" (2)
--"too much time is required for use" (3)
--"The average NCO is scared to death of GPS unless he has the support to carry it off."

c. Performance Management (7)
--"It's difficult for me to reinforce good behavior even though its mostly poor" (2)

d. Management by Objectives (13)
--"MBO at my level isn't too useful" (5)

Combining Workshops. When asked whether all three workshops were necessary, 74% of the participants agreed that they were. Thirteen participants (11%) thought that, to save time, the MBO workshop should be dropped, one felt Group Problem-Solving was of no use at his level, and one would drop all three workshops due to the amount of time involved.

Five participants thought that all three workshops should be combined. Fourteen others (18%) thought that the training program would be better if MBO and Performance Management (PM) were combined into one workshop, while five participants would combine I/GPS and PM.

Role Compatibility. When asked if any of the workshop skills and techniques were incompatible with their role as an Army leader, 80% replied "no", while eleven participants (14%) indicated that SKIM skill use depends on the situation (e.g., there are times when a 1SG cannot take the time to use Group Problem-Solving"). Four other participants (6%) specified the following skills as being incompatible with their role as an Army leader:

a. "Posting emotions during problem-solving."

b. "Rewarding subordinates; often its difficult to obtain the CO's permission for 'big' rewards."

c. "Setting goals and objectives; too much time required."

3. Method of Instruction

All participants stated that they liked the method of instruction, especially role-playing. Sample comments:

"Initially, I thought it would be another MAPTOE but found out different...videotape replay and role-playing was an excellent way to see and evaluate personal behavior and to change 'hard-core' around."

"It couldn't have been better--got involvement and participation from everyone."

"It was outstanding from my point of view; 'hands on' training helped me learn."

"To increase transfer to real-life, bring in naive troops more often to try skills on and then get feedback from peers like it was done in MBO workshop."

Mixed Ranks. With reference to mixed ranks (including officers and NCOs in the same workshop group), responses were mixed. Comments varied as follows:

"Mixed ranks was healthy; different views prompted more discussion."

"A homogeneous group (e.g., all enlisted men) might be more relaxed and favor discussion of work situation problems."

Instructors. The workshop instructors were rated from "good" to "outstanding." Of the 70 participants who responded to the question, "Would you have rather had Army officers as instructors?", nine (13%) said, "It wouldn't matter as long as they were qualified." The remainder (87%) indicated that they preferred non-military instructors. Typical reasons:

"It would be too formal with Army instructors--party line prevents good discussion--informal relaxed atmosphere is necessary."

"It would probably be hard to find Army instructors as well qualified."

4. New Skills or Old?

In relation to their previous training and experience, participants estimated that, on the average, about 41% of the techniques and skills presented in the workshops were new to them. Estimates ranged from 0% to 100% with a standard deviation of 26.

Skills Learned. When asked if they learned more of "what to do" or "what not to do", participants replied: "equally"--32%, "what to do"--38%, and "what not to do"--30%.

Examples of "what to do" include:

"How to structure a problem-solving meeting, handle 6-8 people and get their ideas."

"Posting problems is really valuable, it separates issues from personality."

"Hearing a person out rather than cutting off."

"To get the poeple involved relaxed, get problems out in the open, and let individuals solve their own problems.

"When to use reinforcement and how to do it specifically."

"Listen and write down problems and situations."

"How to state a problem."

"How to react to a man after you've listened to him and he opens up."

Examples of "what not to do" include:

"Instead of finding bad, look for good."

"Listening not talking, let him decide."

"Not using 'put downs' and how not to over-react."

"I learned not to jump on or talk down to subordinates."

"Not to make decisions alone, to delegate and involve subordinates."

"How threats are not the best approach."

"To not always lead the group, to let them come up with answer."

Formal Learning. Most participants (66%) indicated that they had learned some of the SKIM skills formally elsewhere. Counseling skills were referred to most often (25%). Locations included college courses, ROTC, USMA, Officer's Basic Course and the NCO Academy.

On-the-job Learning. Most participants (88%) also indicated that they had learned some of the SKIM skills on-the-job. Again counseling skills were most often noted (44%). Modeling others and trial & error learning were mentioned most often as the general methods of skill acquisition.

Formalize? Most participants (68%) also felt that the workshops "formalized" what they were already doing. Those who had already acquired SKIM-type skills before attending the workshops said:

> "Just more detailed, especially MBO."
>
> "In most cases, it just reinforced what I was already doing."
>
> "SKIM mostly put things together for me, especially on how to motivate people."

Others made statements like:

> "It spelled out more detail and filled in gaps."
>
> "I never used group problem-solving before."
>
> "I discovered the reasons why people behave as they do."

5. Use of SKIM Skills On-the-Job

Typical examples of use of SKIM skills or comments on SKIM skill use that were elicited are listed in Appendix C.

Table 5 displays participants' median* estimates of: (a) number of opportunities to use SKIM skills per week (month), (b) percent of time SKIM skills actually used (before and after training) and, (c) percent of time satisfied with results of using both SKIM skills and other approaches.

*Since most of the distributions of estimates are either skewed positively or negatively (most of the estimates falling in the lower or upper portion of the range of scores, respectively), the mean as a measure of central tendency is distorted by extreme scores in the distribution. Therefore, the best statistic to represent the typical value in any distribution is the median, the point at or below which exactly 50 percent of the estimates fall. Due to such non-normal distributions, the large differences between medians of interest, and the subjective nature of the data, no tests of significance are presented.

TABLE 5

MEDIAN ESTIMATED USE OF SKIM SKILLS

SKILL AREA	UNIT	N	MEDIAN ESTIMATED NUMBER OF OPPORTUNITIES TO USE SKILLS (PER WEEK)	MEDIAN ESTIMATED PERCENT OF TIME ACTUALLY USED SKILLS			MEDIAN ESTIMATED PERCENT OF TIME SATISFIED WITH RESULTS	
				BEFORE TRAINING	AFTER TRAINING	DIFFERENCE	SKILL APPROACH	OTHER APPROACHES
PROBLEM-SOLVING APPROACH TO PERFORMANCE COUNSELING	A	15	5	30	50	20	90	60
	B	28	5	10	50	40	72.5	50
	C	32	5	25	55	30	75	50
	COMB	75	5	20	50	30	75	50
GROUP PROBLEM-SOLVING	A	15	2	10	90	80	90	45
	B	27	3	08	52.5	44.5	95	50
	C	28	2	20	50	30	82.5	52.5
	COMB	70	2.5	10	60	50	90	50
BASIC SKILLS OF PERFORMANCE MANAGEMENT	A	14	14	27.5	75	47.5	90	10
	B	25	10	40	80	40	90	55
	C	32	18	50	80	30	95	25
	COMB	71	15	50	80	30	95	25
			(PER MONTH)					
MUTUAL GOAL SETTING	A	11	2	50	100	50	97.5	65
	B	19	4	25	50	25	80	75
	C	28	4	37.5	72.5	35	90	62.5
	COMB	58	4	25	65	40	90	75
WRITING OUT PERFORMANCE OBJECTIVES WITH SUBORDINATES	A	11	2	10	75	65	92.5	75
	B	20	4	0	10	10	75	80
	C	27	5	0	7.5	7.5	75	75
	COMB	58	4	0	17.5	17.5	75	75

Figures showing distributions of gains in estimated SKIM skill use (difference between before and after training) are found in Appendix D. In general, a detailed analysis of the data indicates that most of the increase in SKIM skill use occurred for those who did not use SKIM at all or very slightly before training. A breakout by rank of those who estimated they had increased their use of SKIM skills by 30 percentage points or more is also contained in Appendix D.

Performance Counseling Skills (Individual Problem-Solving). The top portion of Table 5 shows that participants had a median estimate of about 5 opportunities to Performance Counsel subordinates during a typical week. The combined median increase (before and after training) in estimated use of a problem-solving approach to performance counseling was about 30 percentage points (20% to 50%).

Although Table 5 shows that participants seemed to be well satisfied with the results of a problem-solving approach (75% median satisfaction rate) they also acknowledged that they obtain satisfactory results (at a 50% rate) from the use of other methods of performance counseling (e.g., presenting "solutions" and/or a "chewing out" to subordinates).

Participants stated that they were prevented from using a problem-solving approach more often or obtaining more satisfying results for the following reasons (frequencies are in parentheses):

Lack of time--"Things have to be solved quickly"; "A problem-solving approach takes too much time to do a good job"; "Lack of patience." (34)

Type of person involved--"Individuals fight authority"; "Some don't want to be helped"; "Some subordinates 'so far gone' its not worth trying." (21)

Type of problem or situation--"Only one solution possible"; "Situations don't lend themselves to performance counseling"; "Often have to use direct orders--the situation is too serious." (13)

No subordinates or they never need counseling. (8)

Just didn't think it would work--
"Personality conflict with subordinate,"
"Outside factors too overwhelming,"
"I have no control, no final say." (7)

Lack of competence--"I need more training." (5)

High personnel turnover--"No priority for retraining those who need it." (2)

Group Problem-Solving Skills (GPS). The combined data in Table 5 also show that participants had a median estimate of about 2.5 situations where Group Problem-Solving (GPS) skills could have been used (i.e., where acceptance of the decision by subordinates was an important issue) during a typical week. The combined median increase (before and after training) in estimated use of Group Problem-Solving skills was about 50 percentage points (10% to 60%).

Although participants seemed to be well satisfied with the results of using Group Problem-Solving skills (90% median satisfaction rate), they also acknowledged that they obtain satisfactory results from the use of other methods of solving "people problems" (at a 50% rate).

Participants stated that they were prevented from using GPS more often or obtaining more satisfying results for the following reasons (frequencies are in parentheses):

> Time--"It takes too much time to get people together"; "Required reaction time is too short"; "Impatience." (36)
>
> Type of situation--"Solution already given to me"; "Lack of freedom to use solutions generated, policies are fixed"; "Work is routine." (20)
>
> No subordinates or lack of opportunity due to job position/level in unit--"I usually can only advise, not decide." (14)
>
> Quality of personnel--"Subordinates not experienced enough in job, their knowledge is irrelevant or they are too set in their ways to help in problem-solving"; "I don't trust them." (6)
>
> Inexperience/fear/risk of using GPS. (4)

Performance Management Skills. Participants estimated that they had about 15 opportunities per week to use the basic skills of Performance Management (e.g., immediate reinforcement of specific "good" subordinate performance). The combined median increase (before and after training) in estimated use of the basic skills of Performance Management was about 30 percentage points (50% to 80%).

Participants seemed to be well satisfied with the results of using basic reinforcement techniques (95% median satisfaction rate). They acknowledged that they obtain little satisfaction (at a 25% rate) from the use of other methods of "motivating" subordinates (e.g., using criticism or threats).

Although it was expected that participants would set up numerous complete Performance Management programs for their subordinates (where recording and graphing of behaviors would be carried out), only 16 (23%) reported having opportunities. Of these, only nine (13%) actually set up such programs.

Participants stated that they were prevented from using basic Performance Management skills more often, setting up complete programs more often, or obtaining more satisfying results for the following reasons (frequencies are in parentheses):

Lack of time (too many duties and/or subordinates or lack of time to be thorough). (32)

Type of situation (not able to interact frequently with troops or no subordinates). (15)

Quality of individuals (resistance to reinforcement). (10)

Just don't do it; forget. (5)

Lack of control of reinforcers. (4)

Lack of competence (not sure of how to use skills properly). (4)

Turnover too high. (3)

Not convinced that reinforcement programs work. (2)

Lack of standards. (1)

Lack of reinforcement by superior for participants' use of reinforcement with subordinates. (1)

Mutual Goal-Setting and Performance Objectives. Participants estimated that they had about four (4) opportunities to write performance objectives during a typical month.* The combined median increase (before and after training) in estimated use of mutual goals setting was about 40 percentage points (25% to 65%) and for writing of performance objectives, about 17.5 percentage points (0% to 17.5%).

*This data is based on N=58, as 12 participants did not attend the MBO workshop and six others said that in their position they had no opportunity to set goals and objectives.

Although participants seemed to be well satisfied with the results of mutual goal setting (90% median rate of satisfaction), they also acknowledged that they obtain satisfactory results from setting goals themselves (at a 75% rate). Since so few participants actually wrote out performance objectives, the number estimating their percent of time satisfied was small (N=29). Although most of those who responded seemed to be well satisfied with the results of writing out performance objectives, (75% median rate of satisfaction), their rate of satisfaction with the results of just stating performance objectives was the same (75%). This similarity probably points out why more participants did not increase the rate of writing out performance objectives--they perceived no need.

Participants stated that they were prevented from setting more goals mutually, and/or writing performance objectives more often, or obtaining more satisfying results due to the following (frequencies are in parentheses):

> Lack of time--"Easier and quicker to do verbally"; "They keep changing higher-level goals." (20)
>
> Position in unit/no opportunities to set goals--"Goals are set through chain of command, not by me." (16)
>
> Situation--"Goals and objectives are re-occurring, don't need re-setting"; "Job is very routine." (9)
>
> Lack of confidence in using skills." (2)

Addition of Chalkboards or Paper Pads. Because of the emphasis placed in the SKIM training on posting problems and ideas publicly, a meaningful and unobtrusive measure of the use of SKIM skills is the voluntary addition of a chalkboard or a paper pad to participants' offices. Thus, it is noteworthy that 21 participants (28%) stated that they had added a chalkboard or paper pad to their office. Six others stated that they use an existing chalkboard or one in nearby classroom when group problem-solving. Seventeen others stated that they used paper, instead, to write things down and then make sure their subordinates see what they wrote. Thus, over half (58%) of the participants stated that they were usually posting problems and ideas publicly when problem-solving.

6. Effect of SKIM Skill Use

Overall, 80% of the participants stated that their on-the-job use of the skills presented in the workshops had increased after training.

Subordinate Performance. Sixty-eight (68) percent of those interviewed stated that due to SKIM skill use, they felt that their subordinates definitely showed improvement in performance. Because they had difficulty making "before" and "after" training comparisons, 24% could not or would not respond to the question. Only six participants (8%) stated that no noteable improvement occurred on the part of their subordinates (two of these stated that their subordinates were doing quite well before training). Typical comments about subordinates were:

"They come to me instead of keeping problems to themselves."

"I get much more work out of one man; his appearance has improved, his room is neater, and he has a better attitude toward his job and the Army. In fact, I got him promoted to SP4 as a reward for his improvement.

"Now my men understand what to do; I can delegate responsibility."

"My subordinates are discussing more often with me what they are doing and their performance."

"Because of an initial misapplication of reinforcers, my people started 'slacking off' and taking advantage of the situation. After adjustment, things turned out good."

"There has been some improvement but my subordinates were fairly good to begin with."

Subordinate Reaction. Most participants (71%) said that they had noted only positive subordinate reactions to their increased use of SKIM skills. Ten (16%) stated that they had noticed some initial negative reactions, however. The remainder (13%) could not say or noticed no noteable subordinate reaction to SKIM skill usage. Typical responses were:

"They were a little skeptical at first but now they appreciate being able to get help."

"It was a mixed reaction.. Some NCOs may feel some resentment, that I'm too soft--like 'what's wrong with the 1SG'?"

"One man said he was embarrassed by compliments."

"Some thought it was a joke to group problem-solve. Also, some reinforcers I used turned out to be sarcastic and funny."

"Some lower EMs were dumbfounded when listened to for a change--very positive reactions."

"At first, shocked. Not treated this way before. A new man in the section wanted to get out of the Army; now he is reenlisting."

Increase in Subordinate Use of SKIM Skills. When asked if they had noticed any increase in their subordinates' use of SKIM skills as a result of having observed their leader's use of them, 43% of the participants said that they had. The remainder said that no increase was noticed (41%) or that they could not respond to the question (16%) because they either had no subordinates or could not observe them in interactions with subordinates. Typical comments:

"Some skills became contagious, especially active-listening and reinforcement."

"The Motor Sergeant is now getting away from the direct order approach and setting goals mutually."

"One young NCO picked up the use of reinforcement, now he handles his troops like I do mine."

"Several NCOs have gathered their men around to group problem-solve. I've seen them writing problems down on paper."

"Except to discuss problems with each other more, there has been no 'real' increase in subordinate use."

"I can see that those who were trained are using the skills more often, but not others."

7. General Payoff Due to SKIM Training

When participants were asked if any general payoff had occurred for them, personally, as a result of SKIM training, 81% stated that either they had noticed positive results in their unit or that they had learned to become better leaders through the use of SKIM techniques. The remainder (19%) stated that they did not notice any payoff or that their situation remained about the same. (Several of the latter noted that since they already used SKIM skills before training, improvement was unlikely.) Typical comments (military):

"Jobs get done better and faster."

"I used these skills before and now I feel more comfortable with them."

"I feel more confident as a leader."

"My subordinates need less supervision."

"I noticed I've become better at making decisions; I became a faciliator/moderator for my peers; we get acceptable decisions."

"I am able to delegate more responsibility; my job has become easier."

"I get more ideas out of my Junior NCOs; developing subordinates is a worthwhile experience."

"During tank gunnery, because of SKIM skills, three of our tanks scored highest in the squadron."

"I feel more confident to approach and to work with people; I get to know their needs and I am able to motivate them."

"By getting my people involved, they have a thorough understanding of how decisions are made; goals are now the focus for everyone; no confusion like before."

Typical comments (non-military):

"I get real good results when I use problem-solving and reinforcement with my children; we have a better relationship."

"I got my son to stop using a 'magic marker' on everything through reinforcement. Also, at church I have the Sunday School Department setting goals."

"I use it more at home; my wife talks more and is more happy."

"My son has stopped throwing tantrums because of some of the SKIM skills I used."

"I've used reinforcement with my wife and it's been very successful."

"I'm less cranky with my family, I'm using reinforcement techniques to get my son to put his toys away."

Payoff for Subordinates. When asked about noticeable payoff for subordinates, 81% said that they had noticed positive results. The remainder (19%) noticed no change or had no subordinates. Typical comments:

"NCOs are willing to listen to their people since they are being listened to."

"My subordinates get more time off as rewards, more letters of appreciation, and promotions."

"They feel they have more say in what happens in the unit; there is more job satisfaction and a sense of belonging to a team."

"Performance counseling opened up two-way communication and got problems resolved. Efficiency increased and some subordinates got promoted."

Payoff for the Unit. Most participants (68%) stated that they had noticed a positive payoff for their unit due to SKIM training. The remainder stated that they were unaware of any payoffs for their unit. Typical comments:

"It's on record that our platoon has improved in every area; we know we will be reinforced appropriately."

"The unit is more cohesive and functioning quite well now. The sections are working more closely together."

"The fact that we were the best battery in the 11th Group was due in part to SKIM training."

"The battery is better overall as Article 15s are down, personal appearance better, performance and maintenance are better."

"SKIM has encouraged unit leaders to do a better job of helping individuals."

"I'm not sure, as too many factors are involved--there's more stability now after high turnover in September."

"SKIM is not as effective as it could be, more emphasis is needed to reap the benefits."

"Due to high turnover, lots of pressure, and other priorities, there has been no noticeable results."

"Some feel that they have benefited from the training, but I, personally, do not see any benefits. It may be too early to tell."

Expected Payoff If All Unit Leaders Were SKIM Trained. When asked, "If all of the officers and NCOs of this Battalion/Squadron were trained in SKIM skills, what sort of payoff would you expect?", 88% of the participants thought that wide-range positive results would be obtained. Another 11% felt that the payoff would be slight or marginal. Only one individual felt that the amount of payoff expected would not be worth the amount of time spent in training. Typical comments:

"If after training, a 100% utilization were made, then the payoff would be tremendously positive. Otherwise, some internal 'feuding' might occur."

"It's got to work; the system we have is not working."

"Two-way flow of information instead of 80% down."

"Increase tactical proficiency (perhaps technical) since everyone would have more of a part in how things are done."

"I don't expect great improvement--but some."

"Well thought out missions would come down with objectives and standards (now only one standard--"the best").

"It can't get much better in this battalion, but would be near top in all phases of performance."

"There would be some long range effects such as good people staying in and higher reenlistment--but turbulence would alter this factor unless the whole Army were trained."

"Everyone would work better together, rather than compete so much."

"I can't see anything but a better battalion--more problems would be solved at lower levels."

"There would be far less complaints from lower EM. They would understand they are part of a team. It would be time consuming but the end would justify the means."

8. Training of Others

Table 6 presents participants' views about who should be trained in SKIM skills. Participants were asked to indicate, from their point of view (position in the unit), whether unit personnel named (other than those who had already been trained) should receive training as indicated. (Where total N in a cell is less than 76, personnel of interest were either already trained or participants did not attend that particular workshop themselves.)

The data indicates that participants were very interested in having other unit leaders receive training in all three SKIM skill areas. Training in Performance Counseling for subordinate leaders was most highly recommended (95%), whereas training in MBO was least recommended (71%). Noteworthy is the fact that most of the participants would recommend refresher courses in all three workshops for themselves.

Which Leaders? When asked to specify individuals who need training by name or position, all key leader positions were repeatedly named by participants. Special emphasis was given to:

Regimental/Group and Squadron/Battalion COs, XOs, and Staff Officers

All junior NCOs

Required or Voluntary? When asked if SKIM training should be required or voluntary, most participants (70%) said "required"; 22% said it should be "voluntary", and six (8%) said "It depends on who is being trained". Additional comments:

"It should be required just to get them there; then they will see that it's worthwhile."

"It should be required because the ones who need it most are quite resistent."

"It should be required training or people will fail to attend class-and then it wouldn't be worthwhile for the unit."

TABLE 6

Recommended SKIM Training
For Other Unit Personnel

Unit Personnel (other than those already trained)		SKIM Skill Area											
		Performance Counseling			Group Problem-Solving			Performance Management			Management by Objectives		
		Yes	?	No	Yes	?	No	Yes	?	No	Yes	?	No
Superior Leaders	N	55	4	8	51	8	9	44	5	13	49	5	11
	%	82%	6% (N=67)	12%	75%	12% (N=68)	13%	71%	8% (N=62)	21%	75%	8% (N=65)	17%
Subordinate Leaders	N	72	1	3	68	2	6	63	4	2	48	9	11
	%	95%	1% (N=76)	4%	89%	3% (N=73)	8%	91%	6% (N=69)	3%	71%	13% (N=68)	16%
Peers (Associates)	N	65	3	5	67	2	4	58	6	4	49	7	9
	%	89%	4% (N=73)	7%	92%	3% (N=73)	5%	85%	9% (N=68)	6%	75%	11% (N=65)	14%
Myself Again (Refresher)	N	46	3	26	40	4	28	37	9	19	31	7	26
	%	61%	4% (N=75)	35%	56%	6% (N=72)	38%	57%	14% (N=65)	29%	48%	11% (N=64)	41%

"For the program to succeed it needs command emphasis, so it should be required."

"It depends. You don't want to alienate individuals. Some won't volunteer; but if a person is expected to be an Army leader, it should be required."

"It depends on skill level of the person. For E-8 up and MAJ up it should be voluntary."

9. Training Location

Most participants (53%) felt that if SKIM training were introduced throughout the Army, it should be done in-unit, like it was here. Thirty two (32) percent felt it should be done in regular Army schools and 15% felt it should be done either in special schools of some kind or in both schools and in-unit. Relevant comments:

"It would be more acceptable in-unit; school is too far removed from real life. Also in-unit a man knows he will use skills right away."

"With in-unit training there is no delay between learning and using."

"It should be available on all major posts; have training one week before starting assignment in unit and then a refresher six months later."

"A man should spend 5 or 6 months on the job first, then be trained."

"If training is in-unit training, there is more of a chance to do something about problems existing in the unit."

"In-unit training should be a supplement to Army schools."

"Regular schools are too canned--too quick. You need in-depth training like SKIM training."

Which Army Schools? When asked, "If SKIM training were introduced through regular Army schools, which ones would you choose?", participants checked the following (they checked as many as desired):

34 (45%)	ROTS	33 (43%)	OCS	28 (37%)	USMA
54 (71%)	Basic Officer			50 (66%)	NCO Academy
39 (51%)	Advanced Officer			53 (70%)	NCO Basic (NCOES)
19 (25%)	C&GS College			48 (63%)	NCO Advanced (NCOES)
16 (21%)	Army War College			38 (50%)	Sergeants Major Academy
34 (45%)	Drill Sergeants School			10 (13%)	None of the Above

Who Should Instruct In-Unit? When asked, "If SKIM training were done in-unit, who should be the instructor(s)?", participants chose the following (some chose more than one):

62 (82%) Special trained personnel (like HumRRO)

8 (11%) Unit personnel

2 (3%) Higher HQ staff personnel

10 (13%) Other, specify

Relevant comments:

"Have NCOs train NCOs."

"Combine experienced Army people with HumRRO."

"I would like to see a combination of special trained personnel and unit personnel."

"It would be better with civilians; participation is difficult in a military-led class."

10. Junior NCO Training

All participants felt that Junior NCOs, in their respective units, should receive at least a shortened version of SKIM training (i.e., performance counseling and performance management).

Selection of Candidates. Most participants (88%) felt that one NCO or a small percentage of NCOs should be selected from a section for training at any one time. The remainder (12%) would train all NCOs from a section at one time. Sixty percent felt that candidates should be selected by unit leaders according to certain criteria (such as being a career NCO), while 40% felt that all NCOs should attend, no matter what

Schedule. Assuming that the Junior NCO workshop averaged 16 hours in length, 41% of the participants preferred to have it run for two full days, while 54% preferred half-days for five days. The remainder (5%) preferred an even more stretched out schedule.

Assistance. Most participants (82%) said they would be willing to assist in the training of Junior NCOs, either as a co-instructor or as a coach afterward. Most of the remainder could not because of their position in their units.

11. Follow-on Activity After Training

Most participants (77%) stated that they would like to see more follow-on activity. When asked what sort of follow-on they would like to see happen, there were a variety of answers (frequencies are in parentheses):

> Refresher courses--"...with original groups", "...with live problems", "...in the evening." (16)
>
> Unit problem-solving meetings--"We need to get together to set goals for unit on a monthly basis. Pick worst problems first and get CO involved." (12)
>
> Consulting/visits by researchers"...at the unit level," "...in the field". (9)
>
> Junior NCO training--"I would like to see more training of E-5 and E-6s." (8)
>
> Feedback--"I'd like more feedback on success of the program--more examples of what is being done." (5)
>
> Instructor training--"I'd like to see a member of the unit trained as an instructor so he can train others and give refresher courses." (2)

Need for Help in Using Skills. Most participants (73%) did not feel a need for current help in using SKIM skills. Typical comments were:

> "I talk to others who were SKIM trained and we help each other."
>
> "The reference materials (manuals) are sufficient help."

"I get help from my subordinates."

"I have a conflict with one of my lieutenants where help is needed."

Obtaining Feedback On-The-Job. Eighty (80) percent of the participants did not feel a need for other ways of obtaining feedback on-the-job (other than feedback from subordinates). Almost all of the remaining 20% expressed reluctance toward having someone from HumRRO observe for feedback.

Feedback from SKIM Questionnaires. Seventy five (75) percent of the participants were interested in personal feedback from the SKIM questionnaires. The remainder were mostly skeptical of the accuracy of their subordinate's responses. All participants had at least some interest in unit feedback.

Newsletter. A newsletter, describing incidents where SKIM skills had been used successfully (and unsuccessfully) by unit members, was prepared for Unit B only. When queried about it, only one participant from Unit B felt that it was of no value. Typical responses were:

"It helps to get a feeling of commonality and you can learn from others' experiences."

"It got people talking about SKIM."

Eighty-two percent of the participants from the other two units, when asked about the value of a newsletter for their unit, felt that it would be useful. Typical comments:

"It would be valuable to see where successes have occurred."

"It might help reinforce people for using the skills."

"It would be helpful, you could get ideas from what others did or learn what to avoid."

When asked if they would contribute examples of their use of SKIM skills for use in similar newsletters, 74% said they would. Most of the others felt that it would take too much of their time, even though "logs" had been prepared especially for this task.

Additional Comments: Over half of participants (60%) made parting comments, all of which could be classified as either laudatory or suggestions for improvement. Relevant comments:

"It has been helpful; I managed to save some of my people by using the basic skills."

"Worthwhile; especially for lowest level leader who is in daily contact with EM, has never been a leader, and never had any real training in it."

"The training improved communications more at all levels than anything else I have seen in the Army."

"These skills are good for subordinate development and that is our most important job."

"The program brings conflicts out in open and helps to resolve issues; but there's got to be a point where you can't save a guy, where it's not worth it."

"I enjoyed the training after I got to class, but it took a lot to overcome my initial unhappiness."

"It was a useful program but not necessarily critical (I can "get along" without it)."

"The program was not beneficial to getting the unit's mission accomplished. It took too many key people away at a time when they were needed."

"There were some goals and objectives set in the battalion but no follow through. You've got to go all the way with the techniques or forget it. That's why you should train all the supervisors in the unit."

"I'm somewhat pessimistic about using SKIM skills under the constraints from the Army system. MBO has to be done outside of battalions--not only inside--solutions from group problem-solving can't work if system constraints won't allow them."

"We need to aim a 'pitch' to senior officers expecially in places like regiment."

"I wish command emphasis was placed on training and usage of SKIM skills."

"This training needs more backing and support from the unit and DA."

"I would hate to see the training conducted by military instructors as it would turn into a wasted effort. I would like to see the training expanded Army wide in HumRRO's hands."

DISCUSSION

The purposes of the SKIM training program were (a) to introduce recently developed behavioral-based leadership/management skills and techniques into battalion-sized combat units on a quasi-voluntary basis and to determine if Army leaders would accept them and find them useful on-the-job. It was assumed that by training a minimum of 30 key leaders per unit, sufficient impact would be made to ensure a voluntary continuation of the use of the skills and techniques throughout the unit, followed by the initiation of an in-unit training capability. With this summary, the results of the program will now be discussed.

Acceptance

In general, leaders selected for SKIM training were enthusiastic about the workshops. In part, this was due to the quality of the participants themselves. Almost all appeared to be mission-oriented and saw SKIM training as helping them to meet their leadership/management objectives. Although acceptance of SKIM skills and techniques was high, use on-the-job was typically handicapped by the time required, especially because of the heavy and fast-changing workload demanded of leaders of the units involved.

Differences Between Unit B and Unit C

Although feedback from participants of Units B and C was usually the same, where differences are noteable, they seem to be related to three differences between the units:

(1) Workshop scheduling.

(2) Skill level of participants before training.

(3) Level of "people" problems.

Workshop Scheduling. The scheduling of 32 key leaders of Unit C in concurrent workshops proved to be counterproductive. Most commanders and 1SGs commented frequently that trying to keep their unit

functioning while attending the workshops was difficult. Thus, many participants were placed in a learning environment where their main concern was elsewhere. By comparison, similar complaints from Unit B participants were far less frequent. How much this hardship influenced Unit C participants attitudes toward the training program is hard to say, but, in general, their responses above were less positive than those of Unit B.

Skill Level of Participants Before Training. Participants from Unit C, especially senior leaders, stated that they had already acquired many of the SKIM skills before SKIM training began. For example, item #3 on page B-1, Appendix B, shows that 56% of 60 respondents from both units agreed or strongly agreed that they already used most of the techniques presented in the I/GPS workshop before entering it. For Unit B this percentage was 39%, while for Unit C it was 72%. This difference was verified by other statements (compare "before training" estimates in Table 5) and by performance in the classroom. One consequence was that only about 25% of those who increased their estimated use of SKIM skills by 30 percentage points or more came from Unit C (instead of a proportional 40%). See Appendix D.

Perusal of the backgrounds of participants revealed that those from Unit C were generally more mature, more experienced in command positions, and more often educated in the behavioral sciences.

It follows that a simple diagnostic-type instrument should be given to prospective participants to determine who should attend which workshops and to determine how much time they should spend in each. However, assuming that a brief overview of SKIM training would be sufficient for most field grade officers and selected senior NCOs, training experience has demonstrated that it is worthwhile to have some experienced participants in the workshops, both to provide good models for others and to verify that the skills presented actually do work on-the-job.

Level of "People" Problems. Compared to participants from Unit B, those from Unit C did not appear to have as many "people" problems. For example, during the latter part of the Performance Management workshop, participants were asked to identify subordinates who displayed counter-productive behaviors and to then set up intensive programs to correct such behaviors through the use of reinforcement techniques. Only a third of the participants from Unit C could identify subordinates with whom they could see reason to apply the techniques. In contrast, most participants from Unit B and all participants in the junior NCO workshops were able to identify subordinates whose behavior needed improvement. Further indication

of this difference between the two units is shown in Appendix E, which consists of responses to a "Problem Checklist". It was filled out by participants on the first day of class. Although its intended use was to show participants that they have common "people" problems, it also clearly shows that Unit C participants acknowledged far fewer "people" problems before training than participants from Unit B.

Because of the above three factors, when participants from Unit C came to the last SKIM workshop, Management by Objectives (MBO), they expressed their feelings by turning the last session into a discussion of the amount of time they had spent in this workshop in relation to their already existing skill level. MBO received particular attention because participants felt that the MBO Student Manual was self-explanatory, that they were already using MBO, and that only a few had problems which warranted bringing real subordinates to class to practice MBO skills with.

Management by Objectives

The MBO workshop was not as enthusiastically received by participants from other units either. To most participants the procedures of MBO seemed self-evident (similar to writing operations orders), but the amount of time involved to apply them (in other situations) appeared to be a drawback, especially for lower ranking leaders.

Another drawback to MBO came from the nature of the training of combat units. Although MBO typically involves long-range planning (at least six months), many participants complained about their inability to plan ahead more than two weeks because of constant changes in their training schedules by higher HQ. Although several participants felt that if MBO were introduced at Group/Regimental levels, then MBO would be easier to use at lower levels, most participants realized that the training of combat units had to have uncertainty and sudden change built into the training schedule as an essential feature of combat training itself.

It should be noted that the attitudes expressed toward MBO above were toward MBO as a concept and some trial applications of MBO, not toward an implemented program. Since MBO as a system requires strong support and emphasis by top management to get off the ground and at least a year of application to see results, the intent of the MBO workshops were to introduce the basic concepts of MBO and skills associated with running an MBO system if it were implemented.

It was assumed that given sufficient training and discussion, unit commanders would adopt MBO, over time, into their normal operating procedure, especially since the interpersonal skills critical to the success of MBO had already been acquired by key unit leaders. However, since commanders of Units B and C did not attend the workshops, this critical factor limited the use of MBO to individual unit leaders. Where individual leaders did use MBO, results were satisfactory as the skills were used correctly. For example, the XO of Unit B worked out plans for improved security of the motor park and presented it to his commander for consideration.

In summary, MBO was accepted by participants for use in situations other than operations orders, but due to lack of command emphasis remained untested in a full implemented state.

Performance Management Programs

Although the basic skills of Performance Management were accepted and apparently used by participants, very few SKIM participants reported setting up complete programs where the recorded behavior and charted or graphed it. The amount of time required was certainly a factor, but duty position was even more critical. The behavior of senior leaders' subordinates was normally acceptable; therefore no change was necessary. However, junior NCOs were able to demonstrate both the need and the ability to set up and follow through on numerous Performance Management (PM) programs.

In summary, MBO appears more useful for senior leaders, while PM does not. In contrast, PM seems to be more useful for junior leaders, while MBO does not.

Transfer of Training

Throughout this discussion, the use of SKIM skills is taken for granted; that given "better" leadership/management tools, Army leaders will use them. This assumption was not always true. Some leaders felt they were successful enough with existing skills. That is, more than a few leaders indicated they were content with the "status quo". They had found over time that by maintaining a low profile and following orders, they could avoid failure and thus keep their job. Such individuals demonstrated in the classroom that they could apply SKIM skills, even in difficult situations. However, since there was no emphasis or reinforcement on-the-job for behavior change, they weren't about to risk the chance of failing.

To counteract such behavior (attitude), senior leaders were instructed in how to motivate subordinate leaders to use SKIM skills by reinforcing them for attempts or approximations. In fact, this transfer of training was seen as so critical, the research staff planned to assist senior leaders in developing feedback systems for reinforcing junior leaders. It was felt that if no positive consequences occurred for those who risked using SKIM skills, frequency of use would soon drop.

Unfortunately, time did not permit such assistance, as it did not permit conducting more workshops or refresher courses as requested by unit leaders.

Thus, the use of SKIM skills depended to a large extent on the voluntary use by those trained. It was assumed that if the skills were judged to be worthwile, additional training would be requested. As it turned out, junior NCO training was of great interest, even though actual commitment of NCOs and co-instructors was sometimes lacking.

Co-development

The training program underwent modification during the course of the project until Unit C was trained. This was essential because development of a viable Army-oriented training package had been delayed. Thus, its development and collection of research data on it overlapped somewhat. Since this development involved co-development by participants (other than those of Unit C), a "Hawthorne effect" may have produced results in Units A and B that were biased in a positive way. However, it is well documented that successful applied research projects rely on the involvement of participants throughout their development (24). In fact, if this training program is to be implemented in other Army units, the implementers should make use of participants involvement (and the "Hawthorne effect") if they wish to increase their chances of being successful. In other words, future participants should obtain some "ownership" in the training program, if possible.

Unit Commanders

From the outset, commanders of Units B and C were only committed to the training of 30 key leaders and having the SKIM questionnaires administered to unit personnel every three months. All other follow-on activities were purposely put on a voluntary basis to test the true response to SKIM training. As it turned out, both unit commanders

were initially cooperative and positive toward the training, but cautious about providing command emphasis for SKIM, possibly because they feared it would interfere with achieving mission goals. [As both units are combat-ready units, they have surprise alerts, extended duty in the field, great pressure to keep maintenance at high levels, and high personnel turnover.] Further, since leaders from both units expressed beliefs that their units were performing as well as or better than their sister units when SKIM training was initiated, the unit commanders had no external motivation to adopt new management procedures, such as MBO.

When the commanders of both units received interview data feedback about SKIM training, both became enthusiastic about continuing training, junior NCO training being one outcome. Unfortunately, both commanders were soon due to vacate their commands and had no assurance the new commander or higher headquarters would want to support continued SKIM training without first being made aware of the results. Thus, the training program was not fully nor fairly tested; essential command emphasis was lacking initially and when it was forthcoming, it was too late in the life of the research project to produce the results anticipated by participants themselves (88% of the participants estimated that wide-range positive results would be obtained if all unit leaders were trained).

EVALUATION

Since Unit A had been utilized for developmental purposes and had no "control" counterpart, this section pertains only to Units B and C.

METHOD

This section describes data gathering constraints, instrumentation, and the questionnaire administration procedure.

Data Gathering Constraints and Experimental Control

Data gathering activity consisted of administering questionnaires to unit personnel and giving feedback to unit leaders. This took place in active TO&E units whose daily combat readiness activities took priority over data gathering activities. In other words, data gathering (as well as training) activity was scheduled around unit activities by sandwiching it into an already overcrowded schedule. As a consequence, data gathering was necessarily uneven. For example, since all units were heavily engaged in field exercises, data gathering sometimes had to be rescheduled to fit unpredictable training schedules. Moreover, since the mission of these units required them to be combat ready at all times, training was routinely scheduled to be unpredictable. Further, training schedules typically had experimental units in the field while control units were in garrison or vice-versa. These factors made "simultaneous" data gathering from matched units extremely difficult.

Even when the units weren't in the field, substantial numbers of their personnel were typically unavailable for data collection due to constant support commitments, such as Reforger CPXs, etc. Often, entire sub-units rather than randomly selected individuals were on support assignments. Added to ordinary absences due to TDY, illness, confinement (stockade/jail), AWOL, and the minimum personnel required to man a headquarters in case of an alert, 50 percent of total assigned strength response rates to requests for "all available" unit personnel to be present for data collection were not uncommon.

Added to the fact that one unit had a somewhat different TO&E and mission than its counterpart unit, it is obvious that control for outside factors was less than desirable. However, since a time-series experimental design calls for repeated measures over time, it can be assumed that other-than-treatment effects will influence

results randomly. Since, over time, these random effects will cancel each other out, long-range trends in the data should become apparent. In other words, the argument can be made that given sufficient time to collect data, training effects, if any, would eventually emerge. Pictorially, the research is very similar to time series analysis, except differences over time are measured between experimental and control groups rather than between successive intervals of time (See Figure 1).

Instrumentation

Two instruments were developed, one to measure utilization of skills taught in SKIM workshops (Skill Use Inventory) and the other to measure unit climate (Organizational Climate Survey). After development was completed, these instruments were combined into one questionnaire called the "HumRRO Battalion Questionnaire" (see Appendices F and G) and relabeled Overall Utilization of SKIM Taught Skills (scale 1) and Overall Unit Climate (scale 2). (For discussion of the development and validity of these instruments and their scales, see Appendix H.)

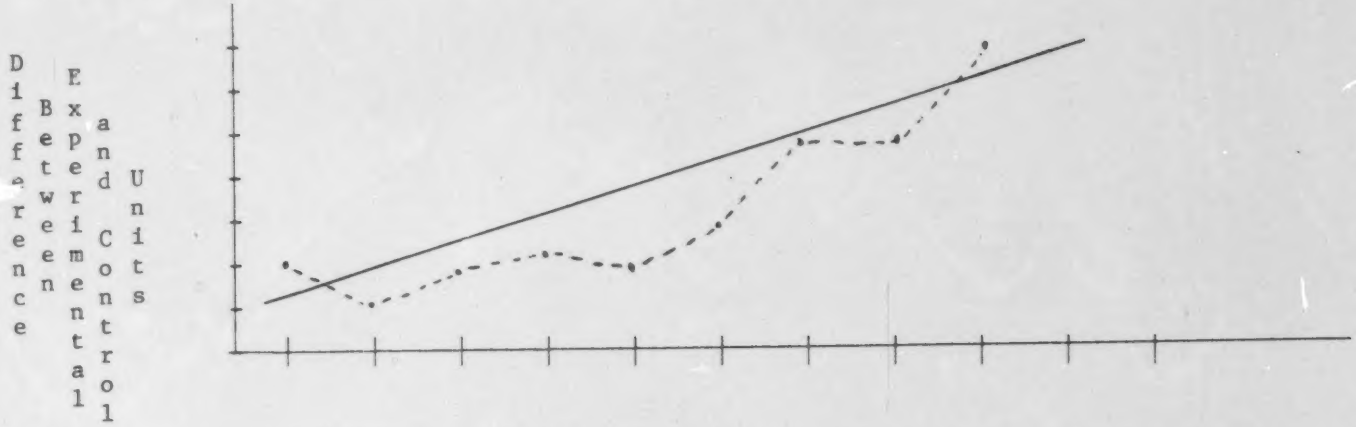
Each of these overall scales was then further broken down by varimax rotation of a principle axis method of factor analysis (25) into 6 and 2 subscales respectively. These subscales were labeled: Individual Job Accomplishment (1a), Dealing with Feelings (1b), Group Problem Solving (1c), Encouragement of New Ideas (1d), Group Goal Setting (1e), Work Distribution (1f), Group Goal Striving (2a) and Leader Subordinate Communication/Work Facilitation (2b). Although not extracted by the factor analysis, Job Satisfaction (2c) was included because of the importance of this content area. Table 7 lists these scales along with reliability estimates (26) of internal consistency for each. As may be seen, reliability was high for all scales except Job Satisfaction which was moderate to low.

Labels for the SKIM Skill Utilization subscales (scales 1a - 1f) were obtained by circulating item lists for each scale to staff at the Ft Bliss Office of HumRRO's Western Division. Each staff member selected what he thought were appropriate labels for the scales and brought them to a meeting with other staff members. All labels for each scale were presented at the meeting and consensus formed on what were the most appropriate labels for each.

Labels for subscales 2a and 2b were obtained by comparing the item content of each to the names given the Survey Research Center subscales. Job Satisfaction (subscale 2c) was composed of three items tapping the individual's feeling toward his work and commonly found in job satisfaction questionnaires (27).

T_1	T_2	T_3	T_4	T_5	T_6	T_7	. . .	T_i	. . .	T_n
E	E	E	E	E	E	E		E		E
↑	↑	↑	↑	↑	↑	↑		↑		↑
d_1	d_2	d_3	d_4	d_5	d_6	d_7		d_i		d_n
↓	↓	↓	↓	↓	↓	↓		↓		↓
C	C	C	C	C	C	C		C		C

(a) Experimental Design: It is anticiapted that d_i will increase through time.



(b) Expected Relationships: True relationships (solid line) emerge as averaged changes over time in measured relationships (dashed line).

Figure 1. Experimental Design and Anticipated Relationships Among Data

Table 7

Item Composition and Reliability for Scales Contained in the HumRRO Battalion Questionnaire

	SCALE	ITEM	RELIABILITY (Coefficient Alpha)
	1. Overall Utilization of SKIM-Taught Skills	Total of All Items in Scales 1a - 1f Below	1.00
	1a. Individual Job Accomplishment	1-12	.96
	1b. Dealing With Feelings	15-20	.98
U	1c. Group Problem-Solving	22-37	.99
N	1d. Encouragement of New Ideas	39-42	.92
I	1e. Group Goal Setting	44-49	.97
T	1f. Work Distribution	51-56	.98
B	2. Overall (Unit) Climate	57-98	.96
	2a. Group Goal Striving	69, 76, 81, 87, 88, 89, 90, 91, 95	.90
	2b. Leader-Subordinate Communication/Work Facilitation	61, 62, 63, 64, 65, 66, 68	.94
	2c. Job Satisfaction	57, 58, 59	.76

	SCALE	ITEM	RELIABILITY (Coefficient Alpha)
	1. Overall Utilization of SKIM-Taught Skills	Total of All Items in Scales 1a - 1f Below	.99
	1a. Individual Job Accomplishment	1-3, 5-12	.96
	1b. Dealing With Feeling	15-18	.96
U	1c. Group Problem-Solving	22, 24-30, 32-36	.98
N	1d. Encouragement of New Ideas	38, 40-42	.96
I	1e. Group Goal Setting	44, 46-49	.98
T	1f. Work Distribution	51-55	.97
C	2. Overall (Unit) Climate	56-96	.96
	2a. Group Goal Striving	66, 74, 75, 87, 89, 94	.87
	2b. Leader-Subordinate Communication/Work Facilitation	60, 67, 72, 78	.81
	2c. Job Satisfaction	57, 58, 59	.73

[1] Prior to training.

Questionnaire Administration

Questionnaires were administered *en masse* either in the unit's battery/troop areas or in a nearby large auditorium. Administration of questionnaires in Unit B was not completed until after the beginning of SKIM training (see Figure 2), introducing an unknown factor into the research design. Only two administrations of the questionnaire were possible in Unit B due to ongoing training commitments.

Each administration included about 1,000 personnel, divided approximately 50/50 between experimental and control units. Questionnaires were handed out and collected by HumRRO and ARI personnel to ensure anonymity of response and to ensure respondents were given sufficient time to complete the questionnaires.

Survey Feedback

As mentioned previously, feedback of questionnaire data (survey feedback) to unit leaders was begun on 1 Mar 75. Appendix I discusses the feedback system and results to date.

RESULTS

Conceptual Approach

SKIM's approach (see Appendix D, pages D-1 and D-2) was based on the hypothesis that increased use of SKIM skills would have increased unit effectiveness.

As a preliminary check on this assumption, the relationship between the use of SKIM skills and measures of organizational climate were calculated (table 8). With the exception of Dealing with Feelings, correlations are moderately high. Thus, in cases where SKIM taught skills were used, unit climate tended to be higher. Inasmuch as unit climate is related to effectiveness, there is reason to believe the use of SKIM skills would be related to effectiveness.

Descriptive Data

Tables 9 and 10 summarize the data obtained from Units B and C, respectively, for groupings of enlisted and officer grades. Each table presents the mean scores for each scale of the questionnaire for both control and experimental components.

Figure 2. Time Line of Training, Questionnaire Administration, and Feedback as of 1 May 75

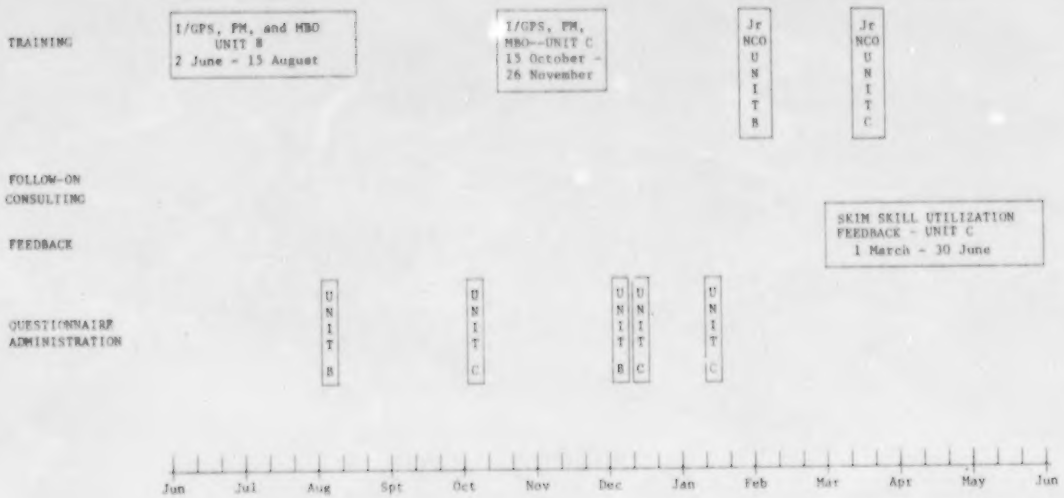


Table 8

CORRELATION BETWEEN SKILL USE AND ORGANIZATIONAL CLIMATE

Organizational Climate	SKIM Skill Utilization: Overall	Individual Job Accomplishment	Dealing With Feelings	Group Problem Solving	Encouragement of New Ideas	Group Goal Setting	Work Distribution
Overall	.75	.76	.34	.58	.63	.60	.72
Group Goal Striving	.64	.61	.28	.51	.55	.54	.62
Leader-Subord Work Facility	.64	.69	.27	.49	.55	.49	.63
Job Satisfaction	.45	.41	.32	.36	.36	.37	.43

Table 9

MEAN SCALE SCORES IN UNIT B BY RANKS OVER ADMINISTRATIONS

Scale	Treatment	E1-E5		E6-E9		Warrant 01-02		Warrant 03-05	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post
Overall Utilization of SKIM-Taught Skills	E	1.5	*	4.5	4.1	5.2	4.6	5.9	4.4
	C	4.7	3.8	4.0	3.9	5.2	4.5	5.0	4.8
Individual Job Accomplishment	E	3.0	*	5.3	4.9	6.1	5.6	6.4	4.7
	C	6.0	3.5	5.0	4.7	5.8	5.4	5.7	5.3
Dealing With Feelings	E	1.0	*	3.5	3.4	3.6	2.9	4.2	3.3
	C	4.7	3.0	3.1	3.3	4.7	3.4	3.4	4.0
Group Problem-Solving	E	1.0	*	4.0	3.9	5.9	4.2	6.3	5.0
	C	4.3	4.0	3.5	3.5	4.6	3.9	5.4	4.6
Encouragement of New Ideas	E	1.0	*	5.2	4.5	4.4	4.9	7.1	5.1
	C	4.0	4.2	4.7	4.6	6.0	4.8	5.3	6.0
Group Goal Setting	E	1.0	*	4.3	3.9	3.9	3.8	5.4	3.6
	C	4.5	4.0	3.9	3.3	4.9	4.6	5.1	4.8
Work Distribution	E	*	*	5.2	4.7	6.2	4.4	5.1	4.8
	C	5.5	4.2	4.5	4.4	6.0	6.7	5.4	5.8
Overall (Unit) Climate	E	4.5	4.8	5.3	4.6	6.2	4.9	6.5	4.5
	C	5.0	4.4	5.3	4.6	6.4	4.4	6.3	5.9
Group Goal Striving	E	4.0	4.1	4.7	4.1	5.7	4.2	6.2	4.2
	C	3.3	3.6	4.8	4.2	6.2	3.9	6.4	5.8
Leader-Subordinate Communication/Work Facilitation	E	5.0	5.5	6.0	5.1	7.5	5.9	7.4	4.4
	C	6.3	5.2	6.4	5.1	7.4	4.6	6.8	6.4
Job Satisfaction	E	2.5	4.0	4.1	3.8	4.1	4.7	5.4	4.1
	C	3.3	3.9	4.1	4.3	4.7	3.8	6.0	5.6

*No Respondents

Table 10

MEAN SCALE SCORES IN UNIT C BY RANKS OVER ADMINISTRATIONS

Scale	Treatment	E1-E5			E6-E9			Warrant 01-02			Warrant 03-05		
		Pre	1st Post	2nd Post	Pre	1st Post	2nd Post	Pre	1st Post	2nd Post	Pre	1st Post	2nd Post
Overall Utilization of SKIM-Taught Skills	E	2.4	5.0	5.0	3.0	3.5	3.7	3.4	3.4	4.1	4.4	4.2	4.5
	C	2.2	3.0	3.9	3.2	3.8	3.8	3.5	3.7	4.1	3.6	4.8	5.0
Individual Job Accomplishment	E	3.0	5.0	5.3	3.3	3.5	4.1	3.7	4.4	4.4	4.4	4.2	4.6
	C	3.9	4.0	5.0	3.8	4.4	4.4	3.7	4.4	4.9	4.2	5.1	5.0
Dealing With Feelings	E	3.0	5.0	4.0	2.2	2.3	2.4	2.4	2.3	2.4	3.5	3.1	2.6
	C	2.2	2.3	2.5	2.2	3.1	2.7	2.3	2.9	2.4	3.0	3.3	3.7
Group Problem-Solving	E	1.8	4.0	4.0	2.6	3.3	3.2	3.9	2.7	4.3	4.5	4.4	4.6
	C	1.6	3.0	3.0	2.9	3.6	3.7	3.5	3.4	3.5	4.8	4.9	5.0
Encouragement of New Ideas	E	2.2	4.0	5.7	3.3	3.5	3.5	4.3	4.0	4.7	5.2	5.3	5.4
	C	1.9	3.3	4.4	3.7	4.6	4.2	4.2	4.3	4.6	5.2	5.6	5.8
Group Goal Setting	E	2.0	5.0	5.0	2.4	2.9	3.4	2.9	2.6	4.3	4.6	3.8	3.8
	C	2.2	1.5	4.0	3.0	3.6	3.4	3.2	3.0	4.0	4.2	4.6	4.6
Work Distribution	E	2.4	5.0	7.0	3.1	3.2	4.0	3.9	4.4	4.8	4.8	4.8	5.3
	C	1.5	3.7	4.8	3.5	4.2	4.2	3.9	4.2	4.4	5.0	5.6	5.5
Overall (Unit) Climate	E	3.7	4.3	4.8	3.7	4.2	4.3	4.4	5.0	5.0	4.9	4.8	5.4
	C	4.0	4.3	4.6	4.0	4.3	4.3	4.8	5.3	5.2	5.3	5.8	5.4
Group Goal Striving	E	3.1	4.0	4.5	3.4	3.9	4.1	4.7	4.9	4.8	5.0	4.9	5.8
	C	3.2	4.1	4.4	3.7	4.1	4.0	4.9	5.4	5.2	5.3	5.7	5.7
Leader-Subordinate Communication/Work Facilitation	E	4.3	4.5	5.3	4.3	4.9	5.0	4.9	5.5	5.4	5.3	5.3	5.8
	C	4.8	4.6	5.2	5.6	4.9	5.0	5.5	5.9	5.8	5.5	6.3	5.9
Job Satisfaction	E	3.5	4.6	4.2	3.6	3.9	3.8	4.4	5.0	4.8	5.3	5.8	5.2
	C	3.6	4.5	4.9	3.5	4.0	4.0	4.1	4.8	4.6	4.7	4.7	5.4

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From visual inspection of these averages, the following trends or tendencies appeared to have occurred.

a. Average scores in Unit B generally decreased in both the experimental and control group.

b. Average scores in Unit C generally increased in both the experimental and control unit.

Contingency tables for the amount of Overall Utilization of SKIM Taught Skills were prepared as a further breakdown of the data. These are presented in Table 11 (Unit B) and Table 12 (Unit C). Comparing the percentage distribution of scores from pre-training to post-training administrations, it is difficult to discern differences between the experimental units and their controls. As in tables 9 and 10, Unit B and its control appear to be decreasing their utilization of SKIM skills whereas Unit C and its control are increasing in the utilization of these skills.

Parametric Analysis

Questionnaires were administered during a period not exceeding one week to as many members of each unit as possible (personnel on sick call, TDY, leave, or absent for other reasons during this period were not administered a questionnaire). Since unit schedules and support commitments fluctuated from day to day, it was possible that individuals taking the questionnaire in the control unit could have differed from those of the experimental. To control for this effect, respondent's rank, how long he had been with his unit, how long he had known his supervisor, his supervisor's rank, and his supervisor's position were held constant statistically (covaried out) when the data were analyzed.

The effects of SKIM, controlling for the above factors, is presented in Table 13 (a more detailed discussion of the differences between these groups is presented in Appendix H).

Differences in Skill Utilization and Unit Climate were insignificant between Unit B and its control. However, Unit C and its control were significantly different on all measures of Skill Utilization. Comparing the trend in Skill Utilization over time between Unit C and its control, it was found that the experimental unit was decreasing in its utilization of these skills faster than the control group (these are the Beta weights presented in Table H-5 of Appendix H).

Table 11

SKILL UTILIZATION FOR UNIT B
BY
ADMINISTRATION

Overall Rating on Skim Skill Utilization	Experimental Unit Administration		Control Unit Administration	
	Before Training	1st Post Training	Before Training	1st Post Training
Always	1%	3%	3%	2%
To a Very Great Extent	9%	3%	10%	6%
To a Great Extent	36%	17%	23%	23%
About Half The Time	12%	21%	12%	14%
To a Little Extent	26%	31%	27%	26%
To a Very Little Extent	9%	15%	11%	17%
Never	7%	10%	14%	12%
TOTAL	100%	100%	100%	100%
N:	120	94	133	120

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Table 12

OVERALL SKILL UTILIZATION FOR UNIT C BY ADMINISTRATION

Overall Rating on SKIM Skill Utilization	Experimental Unit Administration			Control Unit Administration		
	Training	Training	Training	Training	Training	Training
Always	1%	2%	3%	3%	4%	4%
To a Very Great Extent	8%	7%	11%	11%	16%	16%
To a Great Extent	14%	17%	23%	13%	23%	24%
About Half The Time	20%	21%	16%	18%	17%	17%
To a Little Extent	18%	16%	19%	20%	15%	17%
To a Very Little Extent	25%	25%	21%	18%	15%	18%
Never	14%	13%	7%	17%	10%	4%
TOTAL	100%	100%	100%	100%	100%	100%
N:	191	179	141	210	156	184

Table 13

ANALYSIS OF COVARIANCE[1] FOR DIFFERENCES BETWEEN EXPERIMENTAL AND CONTROL UNITS

	SCALE	Unit B		Unit C	
		F	P	F	P
Skill Utilization	Overall Utilization of SKIM Taught Skills	1.32	0.29	7.03	0.00
	Individual Job Accomplishment	2.80	0.05	9.69	0.00
	Dealing With Feelings	1.14	0.34	3.35	0.01
	Group Problem Solving	0.67	0.62	4.29	0.00
	Encouragement of New Ideas	1.11	0.35	5.39	0.00
	Group Goal Setting	0.56	0.69	3.04	0.02
	Work Distribution	1.52	0.19	6.31	0.00
Climate	Overall (Unit) Climate	3.06	0.02	0.48	0.75
	Group Goal Setting	1.15	0.33	2.36	0.05
	Leader Subordinate Communication/Work Facilitation	2.10	0.08	0.23	0.91
	Job Satisfaction	0.38	0.85	0.28	0.89

[1] Covariables are supervisor's rank, supervisor's position, rater's rank, how long the rater had been in this unit, and how long the rater had known his supervisor.

Performance Indicators

One of the major objectives of the evaluation program was to determine if the leadership/managment skills taught to the experimental groups had an impact upon organizational effectiveness, as reflected in the usual Army Command Indicators, such as AWOL rates, and mental hygiene visits.

Such data was collected monthly since training began (nine months for Unit B, seven months for Unit C). These monthly reviews provided data for 55 battalion-level performance indicators for Unit B and 47 battalion-level indicators for Unit C. Figures 3 through 10 present a representative sample of the data for performance indicators that could be considered approximately comparable between Units B and C.

Inspection of this limited sample of data produces diverse trends in performance indicators. In some cases, experimental units appeared to do better than their controls; in others there were either no time-related differences between the experimental and control units or the control unit appeared to do better than its experimental counterpart. Overall the results were inconclusive.

Figure 3. Number of Awards Submitted

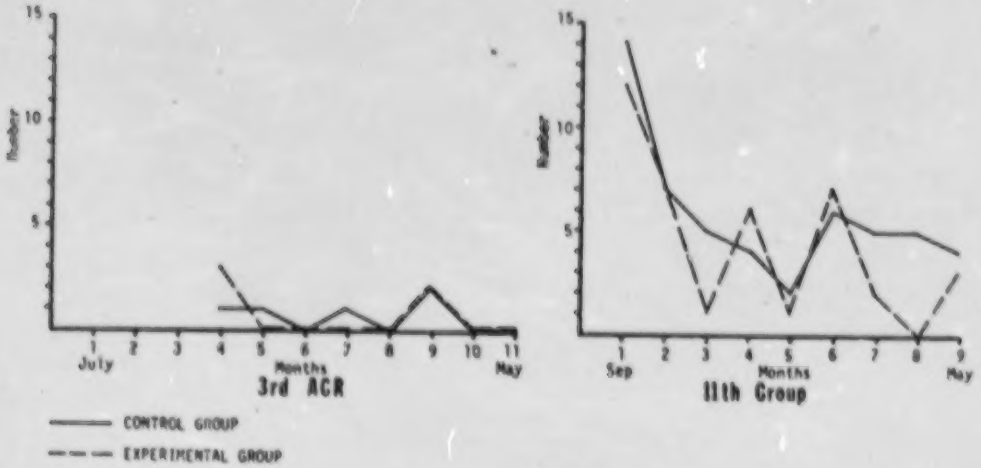

Figure 4. Number of Career Re-Enlistments

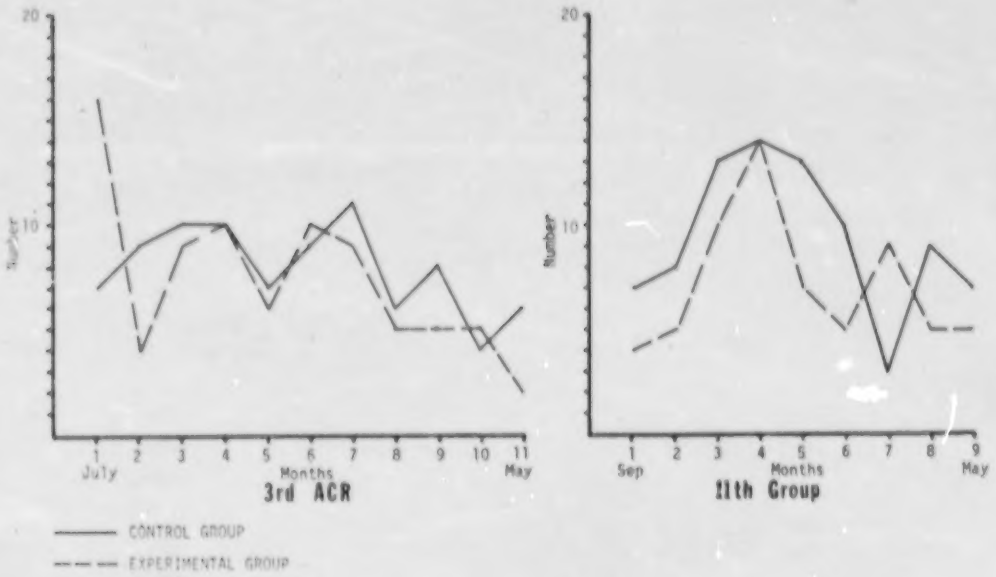

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Figure 5. Number of Visits to Mental Hygiene

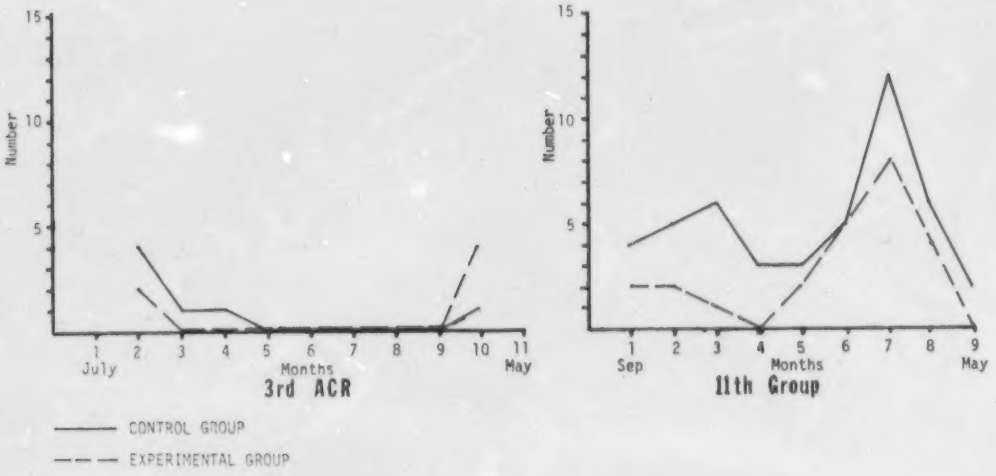
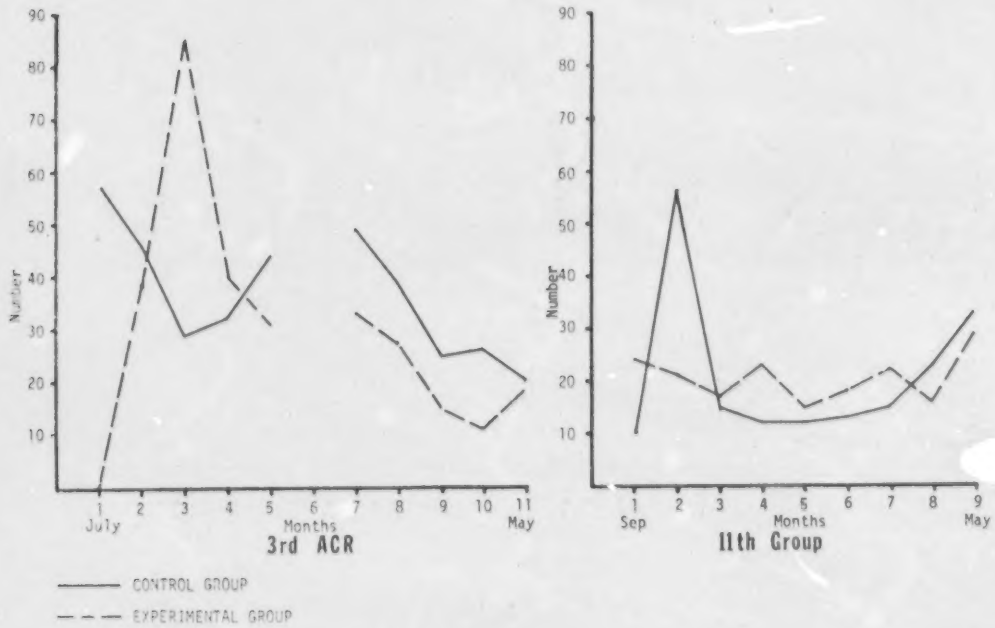


Figure 6. Number of Article 15s



083

Figure 7. Number of AWOLs

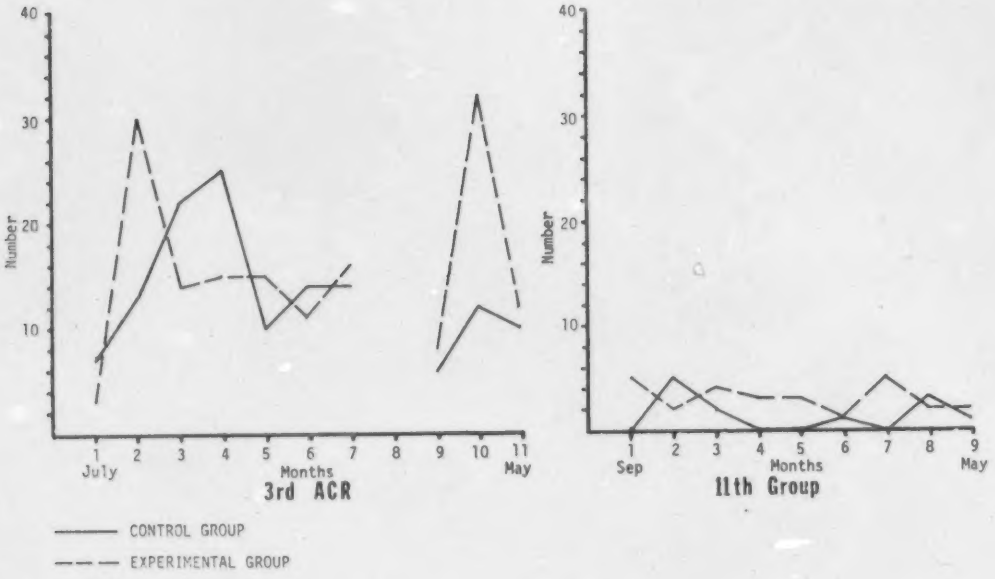


Figure 8. Number of MOS Courses Taken

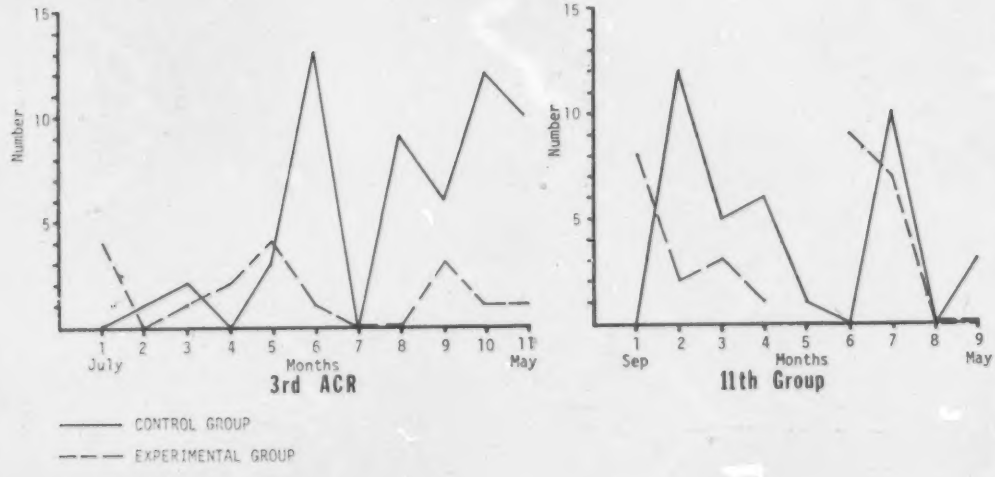


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Figure 9. Number of Special Courts Martial

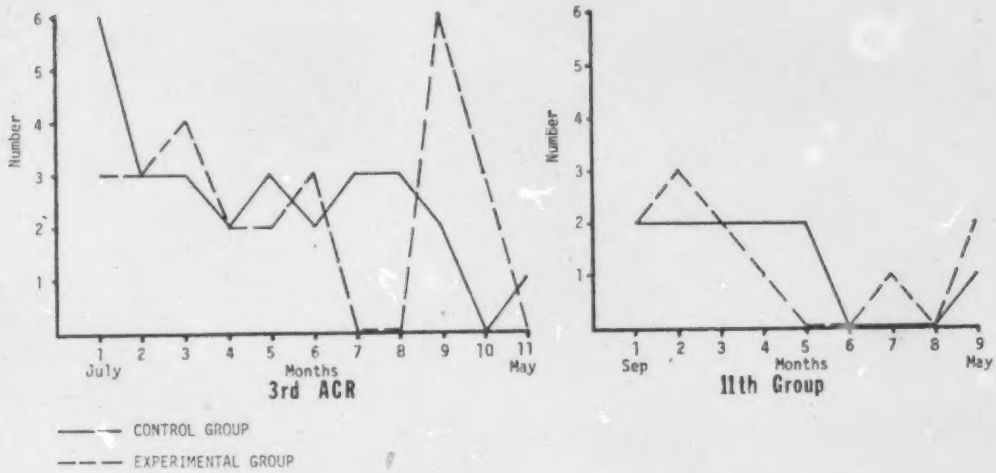
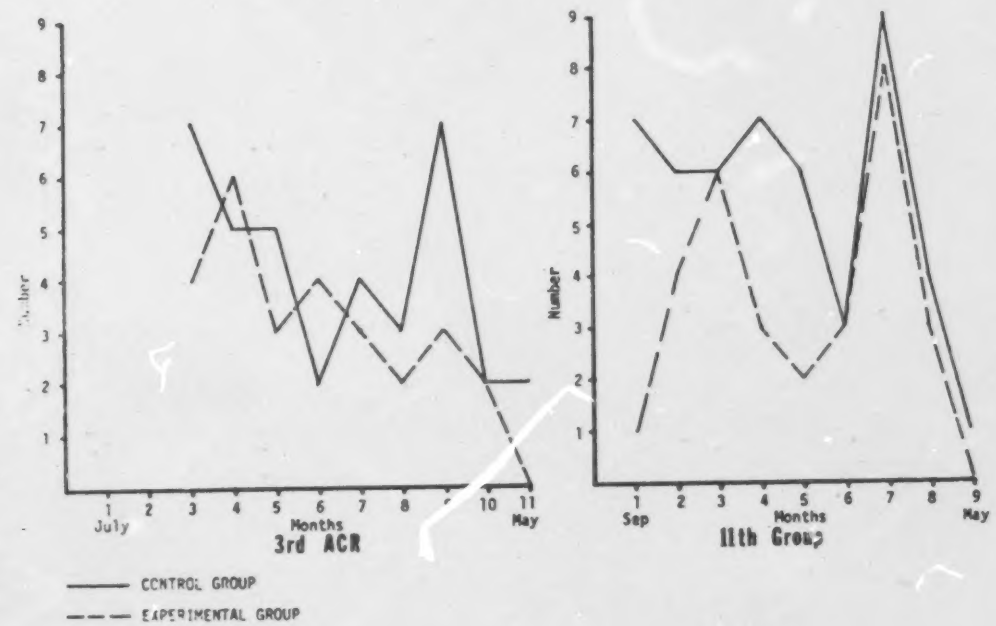


Figure 10. Number of First Term Re-Enlistments



SUMMARY DISCUSSION AND CONCLUSIONS

COMPARISON WITH PREVIOUS RESEARCH

Evaluation of the SKIM leadership/management training package indicates that it was well received by participants, but did not have the impact as expected on unit-wide measures. Several factors seem to account for these somewhat contradictory results.

1. Since unit commanders did not participate in the training, they did not initiate any command emphasis nor commit scarce resources to promoting and reinforcing the use of SKIM concepts and skills throughout their unit. Although positive feedback later convinced them to voluntarily initiate the training of junior NCOs, routine change of command was imminent and momentum to initiate the establishment of an in-unit SKIM training capability was lost. In addition, MBO was never given a chance to operate as a unit-wide management system.

2. Since the units were engaged in combat training, spending up to 60% of their time in the field and routinely reacting to orders from higher headquarters, programs associated with group problem-solving, performance management and MBO were difficult, if not impossible, to carry out as planned. In other words, the environment was not conducive to planned change.

3. Poor scheduling of SKIM training in one unit interfered excessively with mission accomplishment and left a distaste with some participants for continued training.

4. Survey feedback, a valuable means of motivating participants to use SKIM skills, was not available until very late in the project. Feedback which was given was either too detailed or too general: it was not useful as guidance or not sensitive to subtle changes.

5. Follow on consultation with participants on current unit problems, another valuable means of motivating them to use SKIM skills, was not possible due to research staff time being devoted to higher priority tasks, such as collecting interview data.

6. Even if the above factors had been positive the time interval between training and the conclusion of evaluation may have been too short to produce positive results (it was at most 7 months for Unit B and 4 months for Unit C). Typically, human relations training takes at least 2 years of sustained effort to produce significant improvement in performance.

Although two of the above factors, survey feedback and follow on consultation, lie outside of the focus of the SKIM training package, they are, at the same time, viewed by Organizational Development (OD) researchers as essential to achieving measurable organizational change. It appears that the SKIM training package, implemented without such critical factors, was overly ambitious. However, the interview data does indicate that the SKIM training package would be a valuable addition to OD efforts within the Army. Positive outcomes of the training are as follows:

1. The training content (e.g., participative management) was accepted by all participants (by most, enthusiastically) and viewed as useful leadership/management skills for all levels of Army leaders in attaining unit goals.

2. Its 60 hour, behavioral-based, leadership/management training package is designed specifically for TO&E battalion-sized unit implementation. Its 4 student manuals and 4 instructor manuals contain examples drawn from real life experiences of Army leaders at all levels in combat units.

3. The experiential "hands on" instructional methodology (including student manuals) enabled participants to acquire SKIM skills efficiently and effectively. Participants were able to demonstrate competence in using SKIM skills at the end of each workshop. Further, by testing out the skills in simulated problem situations, participants were able to convince themselves that controversial leadership skills such as facilitating group problem solving meetings, were useful and appropriate (even for 1SGs). Later testing on the job confirmed these classroom views for over 80% of the participants.

4. Several unit leaders were able to effectively train their junior NCOs in SKIM skills. Junior NCOs were very enthusiastic about being able to acquire useful leadership/management skills, especially in how to motivate subordinates by leading them rather than pushing them.

5. The in-unit training approach was shown to be an appropriate one for acquiring leadership/management skills as it enabled participants to immediately try out the skills with their subordinates to resolve current unit problems. Transfer of training was obtained for at least 80% of the participants.

6. Two thirds of the participants felt that SKIM leadership/management skills had helped them to improve their subordinates' performance. A similar percentage of participants stated that they had noted a payoff for their unit as a result of SKIM training.

7. No negative outcomes were observed. This fact is noteworthy as it is not uncommon for OD efforts to cause performance to drop during the first year of implementation (20, 21, 28, 29).

FUTURE RESEARCH

In summary, the results of the SKIM training package in terms of participant accomplishments, enthusiasm, and estimated skill use and payoff were quite positive. Comparison with a lack of impact on measures of unit-wide effectiveness strongly suggest that future research efforts merge the SKIM training within full OD efforts. Not only would participants accept OD concepts with less resistance, they also would be able to practice OD concepts as behavioral skills more quickly and with greater competence than is currently possible.

Future research should also focus on:

1. Feedback instruments which provide unit leaders with clear cut indications of skill use and organizational climate. Current instruments are overly complex and require outside assistance for administration, computer analysis and interpretation.

2. Better measures of unit effectiveness to aid in making comparisons between trained and untrained units and to diagnose where and when training is needed.

3. A cost benefit analysis to provide decision makers with clear cut choices and to gain commitment from potential users of SKIM-type training.

FUTURE IMPLEMENTATION

Assuming better feedback instruments and measures of unit effectiveness are available, those interested in implementation should keep in mind that the moderately high correlations found between measures of SKIM "skill use" and "organizational climate" indicate that if the leadership/management skills taught in the SKIM workshops are consistently applied on the job by all unit leaders (analogous to a critical mass), then desired OD outcomes can be realized.

However, several obstacles must be overcome if such an ideal leadership/management environment can be obtained. In other words, unit commanders who are interested in initiating a SKIM type training program in their unit as part of an OD effort should not proceed

until they are willing to provide (or trade-off) the resources and command emphasis associated with resolving obstacles (problems) identified in this research project. For example:

Obstacle #1. Commanders must be involved in the training itself and follow through with command emphasis, especially in implementing an MBO management system.

Obstacle #2. Time for SKIM training must be obtained and scheduled so that mission accomplishment is not jeopardized. Follow-on problem-solving meetings and refresher training must be scheduled.

Obstacle #3. An in-unit training capability must be initiated so that new leaders can be trained as turnover takes its toll--at least until Army schools or Army posts provide similar behavior-based, leadership/management training on a routine basis.

Obstacle #4. To ensure that SKIM skills are used, unit leaders must provide reinforcement and recognition for those who risk taking the time and effort required.

Obstacle #5. Sufficient time for the effect of the SKIM skill use must be allowed. Instant results should not be expected. This means that higher headquarters must be patient and that unit commanders must maintain interest and skill levels with refresher courses and in-unit consulting services as required.

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APPENDIX A

SUMMARY OF CONTENT OF THE THREE SKIM WORKSHOPS

INDIVIDUAL AND GROUP PROBLEM-SOLVING WORKSHOP

Since leadership/management is relative to the situation, it is best to adopt one process which provides the needed flexibility to handle all situations. That process is problem-solving. Only it can guarantee the leader with a means of identifying and deciding which leadership/management techniques to employ, what kind of actions to take, etc. Rather than learning textbook solutions to problems solved by someone else, problem-solving provides a general approach (process) for solving any problem, be it old, recurring, new or unique.

Participative problem-solving skills enable the leader to facilitate his subordinates' or peers' problem identification, problem stating, and solution generation, evaluation, and selection. Such skills can be useful in resolving racial conflicts, preventing drug abuse, increasing morale, and reducing AWOLs. This statement is based on the assumption that daily problem-solving of "small" or "insignificant" problems on a mutually satisfying basis can lead to increased job satisfaction for subordinates as well as to increased productivity, efficiency, and innovation for the organization and the leader.

Participative problem-solving provides a "no-lose" method of resolving conflicts because it facilitates a mutual search for solutions that will be acceptable to both superior and subordinate. However, participative problem-solving is not just another term for "compromise," in which each side loses something. When conflicts are redefined in terms of competing needs instead of opposing solutions, unique solutions can often be derived which satisfy all needs. Meeting needs is usually possible; trying to implement opposing solutions may lead to counter-productive conflict. In any event, leaders needs are protected in participative problem-solving. Even a "far-out" solution that meets subordinates' needs must be acceptable to the leader (meet his needs) before it becomes a "final" solution.

Thus, the necessity for the leader to use the power of his position is eliminated. Further, a problem-solving environment provides a means of preventing conflicts between superiors and subordinates and a means for developing subordinate self-discipline and self-control.

For example, if the development of subordinates is an objective of performance counseling, evaluation often is counter-productive. Likewise, for the leader to suggest solutions often is counter-productive. Instead, the leader should limit his influence to stimulating his subordinates'

thinking. He accepts for consideration any and all ideas that might possibly bear on helping his subordinates improve their job performance. Moreover, he accepts his subordinates as mature and responsible individuals. He sets aside his own viewpoint and tries to see the job as his subordinates see it. If their ideas seem impractical, he explores their views to learn more specifically what was intended. Often, ideas that are difficult to accept are ones that are most misunderstood.

If subordinates are free to analyze their jobs with the intent of having a part in making changes toward improvement, then they will be motivated to think in productive rather than counter-productive ways. Productive or positive thinking produces responsible and professional attitudes. Any changes derived are immediately accepted because they are one's own solutions. In fact, in examining how to maximize the best features and how to minimize the poorer ones, subordinates often voluntarily suggest changes in their own behavior.

Finally, it should be noted that it is not the sheer number of decisions made by subordinates which is important. Rather, it is their significance or importance to subordinates which makes participative problem-solving worthwhile to the leader and his organization in the long-run. In other words, if subordinates are allowed to solve problems which are significant and important enough to them, especially in satisfying their needs or because they will be affected by the outcome, then many by-products, such as "open" communications, will be gained by the organization.

Participative problem-solving skills can be applied at two levels: (1) organizational or group problem-solving, and (2) individual problem-solving (i.e., performance counseling).

Group Problem-Solving. In general, whenever the outcome of goal setting or organizational problem-solving involves the behavior of people, then acceptance of a goal or decision becomes at least as important as the quality of the goal or decision itself. Furthermore, innovative and creative solutions may be quite difficult to put into practice unless they are accepted by all concerned.

Research evidence (1, 2) shows that:

- ✓Group goals or solutions are more readily accepted by those who have to carry them out than those made by their superiors.
- ✓Group participation is in itself satisfying; people enjoy problem-solving and discussing with others those decisions which affect them.
- ✓Utilization of the resources of subordinates often contributes to the quality of solutions or goal setting.

Techniques for facilitating the setting of goals, the participation of diverse individuals in solving problems, or the handling of change consist of analytical and behavioral skills which can be learned. Further, upon developing group problem-solving skills and putting them into practice within an Army unit, a means of realizing several desirable by-products is obtained for leaders:

- ✓Acceptance and understanding of decisions by subordinates is almost guaranteed, and in less time.
- ✓Communication with subordinates becomes "two-way"; needs of subordinates are voiced openly and honestly.
- ✓A more diverse pool of ideas and their synthesis increases the probability that high quality or unique solutions will be generated.
- ✓Subordinates' motivation and commitment to carrying out decisions is improved.
- ✓Subordinates will be more likely to voluntarily approach the leader with problems and ideas as a result of the reinforcing environment obtained.

In other words, group problem-solving skills enable the leader to maximize individual satisfaction, on-the-job, by allowing subordinates to participate in the planning and decision-making of any event which is meaningful to them. Through this involvement subordinates become committed and share the responsibility for achieving goals which have been mutually decided upon.

Individual Problem-Solving (Performance Counseling). There are two general situations when performance counseling techniques are most useful:

(1) When the leader has a subordinate who is exhibiting unacceptable behavior. Performance counseling skills will help him solve this problem, because he is able to obtain his subordinate's help in improving the unacceptable behavior. The leader knows how to inform a subordinate about his unacceptable performance in a way that will lead him to voluntarily modify his behavior to acceptable levels. Also, he knows how to solve problems with subordinates in ways that do not create new problems.

(2) When a subordinate has a problem of his own. It may eventually lead to unacceptable behavior unless it is solved. Performance

counseling skills help the leader to prevent a subordinate's problem from becoming the leader's problem. Therefore, skills and techniques needed by the leader are concerned with enabling him to effectively assist subordinates in solving their problems: active listening, feeding back expressions of feeling, tolerating silence, summarizing, etc.

Skills to "help" subordinates solve their problems are not necessarily the same as those used in getting subordinates to help the leader solve his problem with unacceptable subordinate behavior. Thus, a distinction is made between the two situations. Certain skills focus on how to inform a subordinate about his unacceptable behavior. Other skills focus on "helping" skills such as "active listening". From that point on, skills dealing with how to solve problems, no matter who owns them, are required.

The Individual and Group Problem-Solving Workshop focuses on the participative problem-solving skills required by Army leaders in non-combat situations. Its terminal objectives are as follows:

(1) Given a real-life problem situation, the workshop participant will be able to state the conditions which suggest the use of participative problem-solving techniques.

(2) The participant will be able to identify the situation, analyze it, and use the appropriate skills or techniques associated with:

√detecting, defining and locating problems, with or without subordinates;

√presenting problems to subordinates in clear and unemotional terms, so as to prevent defensive reactions;

√keeping idea-getting processes separate from idea-evaluation processes, since the latter inhibits the former (e.g., being first concerned with: eliciting and feeding back expressions of feelings and opinions or exploring fears, needs, or unusual ideas);

√eliciting alternative solutions to problems;

√examining the advantages and disadvantages (consequences) of each alternative solution (and perhaps integrating them); and

√selecting the best solution for all concerned.

(3) Each participant will be able to facilitate group problem-solving in groups where he is either a leader or member and use a similar problem-solving approach when performance counseling.

MANAGEMENT BY OBJECTIVES WORKSHOP

Management by Objectives (MBO) is a process whereby superiors and their immediate subordinates jointly identify common organizational (unit) goals and set individual performance objectives to meet those goals. These goals and objectives are then used as guides to operate the organization and to assess each subordinate's contribution.

MBO is not a system that requires complicated application because it strives to combine things that most people are already doing into a more logical and effective system. The key to MBO is mutual understanding between a superior and each of his subordinate managers to the degree that both know what the other is doing, why it needs doing, and what is expected in terms of results.

Thus, MBO involves determining where the organization is going, what needs to be done to help get it there, and by when. The emphasis is on getting things done.

As a management system, MBO typically consists of a five-step cycle which is repeated on a regular basis (3, 4):

1. Setting organizational (unit) goals;
2. Specifying sub-goals;
3. Setting individual performance objectives;
4. Action planning; and
5. Reviewing performance.

Many military leader/managers may already be using these steps of the MBO system because, in reality, they are basic to key management functions and activities. Planning, for example, involves establishing goals and determining the means for their attainment. Organizing is generally based upon planned goals, as is decision-making. In fact, MBO follows the same logical steps of writing operations orders.

Step 1: Setting Organizational (Unit) Goals

The superior (commander) and his immediate subordinates jointly generate and select goals to be accomplished by the unit or organization during some period of time. Priorities are included. In determining unit or organizational goals, participants might examine formal mission statements of the organization, such as those contained in TOE, TDA, and related documents. Other goals might be derived from internal problems or requirements from higher headquarters. For example, a common goal for Army units is "to reduce the deadline rate of vehicles".

Step 2: Specifying Sub-Goals

When first stated, unit goals are usually very broad and general. Each goal has to be broken down into specific and measurable sub-goals. The superior and his subordinate managers must come to an agreement as to acceptable measures or performances which define the intended results.

Although quantitative measures (how much) are preferred to qualitative ones (how well), the key to deriving measures of acceptable results lies in disciplined goal analysis. At no time, however, is it intended that numbers be generated just for the sake of quantification; all measures are to be directly related to "workable" goals.

Subordinates typically commit themselves to achieving sub-goals which are compatible with their current job assignments and/or interests. Nonetheless, achievement of most unit goals requires coordination among several subordinates.

Step 3: Setting Individual Performance Objectives

Next, each subordinate leader/manager determines performance objectives (results) that he hopes to achieve in trying to attain unit goals. He and his superior meet to discuss and arrive at a mutually agreed-upon statement of his performance objectives in terms of acceptable performance standards and deadlines.

The focus is on results, not on how the results are to be obtained. Subordinate leader/managers are then free to develop their own plans or courses of action within the framework of each performance objectives.

Step 4: Action Planning

When a subordinate leader/manager needs guidance or is new to his position, it is worthwhile for both him and his superior to engage in specifying "how" to achieve his performance objectives. Otherwise, subordinate leader/managers should problem-solve the "how to" by themselves, with peers, or with their subordinates.

OSR

Step 5: Reviewing Performance

Performance reviews compare performance objectives with actual results. They involve feedback between superior and subordinate on a scheduled basis. That is, after a specified period of time, the superior meets with each of his subordinates to discuss the extent of success or failure for each stated performance objective. Trends toward failure call for corrective action (renewed problem-solving) to overcome obstacles. Trends toward success, of course, call for reinforcement.

Once MBO has been implemented in an Army unit, several desirable by-products will be obtained for superiors and subordinates alike. These include, but are not limited to, the following:

a. Enables leaders to anticipate problems through unified planning rather than reacting to crises.

b. Provides for decentralization of decision-making to lower-level personnel.

c. Enables performance evaluation (OERs and EERs) to be based on clear expectations of what constitutes desired performance and behavior.

d. Allows for voluntary cooperation and coordination because the focus is on results, not "how to". Subordinates decide how to get work done.

e. Increases open two-way communication and understanding between superiors and subordinates.

f. Increases self-motivation and self-control among subordinates.

Management by Objectives is not a system which, once installed, operates effectively without attention. It involves both a philosophy and a way of managing. To a large extent, control over people shifts to control over goals and objectives. Accordingly, success of the system depends to a large degree upon commitment throughout management or leadership ranks. For example, MBO might be expected to provoke hostility or fear in some leaders because its insistence on measurement and results could make them vulnerable to failure. Experience shows, however, that most managers would rather be judged against a clear set of criteria, which they have been able to influence, than against some set of personal characteristics or other vague criteria unrelated to getting the job done.

PERFORMANCE MANAGEMENT WORKSHOP

Performance Management consists of arranging for appropriate consequences to follow the occurrence of specific behaviors. It is well known that the frequency with which a behavior occurs over time depends very much upon the repeated consequences of that behavior. First, the consequences might be positively reinforcing (that is, pleasant or rewarding), then the frequency of the behavior will increase over time. Second, there may be no obvious consequences (neither rewards nor punishment), then the frequency of the behavior will decrease over time. Third, the consequences may be punishing, then each instance of the behavior may cease immediately after the application of the punishment, but the frequency of the behavior over time may increase or decrease depending upon other factors. Furthermore, the more aversive the punishment, the more frequently undesirable "by-products" such as hostility, aggression, resentment, escape, or avoidance will occur. Thus, a leader can arrange consequences so as to increase the frequency of appropriate or productive behaviors and decrease the frequency of inappropriate or counter-productive behaviors.

Performance Management is most effective when positive consequences (reinforcement) immediately follow the performance of desirable behavior. How is this done? First, by devising ways of letting immediate subordinates gain daily feedback on how their work measures up to goals and standards that they have helped set themselves. Second, by detecting and rewarding subordinates' successively closer approximations to the goals, rather than punishing them in proportion to their degree of failure. Third, by setting up a system by which they are rewarded appropriately for meeting or exceeding those goals and standards. Rewards may be praise, recognition, or whatever a given individual perceives as being reinforcing. Such rewards are reduced and eventually removed as soon as appropriate subordinate behavior is maintained by the feedback system alone.

It follows that if the leader creates an environment which rewards acts of innovation, self-reliance, integrity, etc., then that is what subordinates will learn to do (over time, the frequency of occurrence will increase). On the other hand, if he inadvertently punishes them for acting honestly or innovatively, etc., then they will learn to avoid behaving in such ways (that is, the frequency of honest or innovative behaviors will decrease over time).

For example, malfunctioning equipment is often <u>not</u> reported to higher-ups because the individual in charge has found, over time, that he is very likely to get punished for telling the truth. On the other hand, concealing the truth for a while and getting the equipment fixed on his own, has been found to have a low probability of being detected, and therefore, the subordinate's probability of being punished is reduced. It becomes quite clear that dishonesty is being rewarded--the opposite of the leader's intentions.

In such cases, the choice is really largely due to the leader's behavior, for he always provides consequences following the behavior of his subordinates whether he knows it or not. Thus, a superior's behavior is responsible for most of the behavior of his subordinates.

Many organizations throughout our society evidence similar behavioral problems, which, in fact, have been created and maintained by improper behavior management practices. Such practices persist largely because their effects are not monitored at all or are monitored in a restricted fashion for only a short period of time (5). Hence, the manager or leader does not receive adequate feedback regarding his management practices. In such a situation, he cannot help but grasp at vague feelings and impressions rather than admit that he doesn't really know whether or not he understands the consequences of his behavior on his subordinates. Thus, the first requirement of the Performance Manager is that he be able to establish a monitoring system that provides him with appropriate and timely feedback regarding his behavior management practices. (NOTE: Participative Problem-Solving techniques and skills come into play at this point.)

Since the principles of Performance Management assume that the frequency of occurrence of behaviors is determined by conditions in the environment, the work environment becomes a key concern of the Performance Manager. Thus, the second general requirement of the Performance Manager is that he be able to establish a work environment where aversive conditions are minimized; especially criticism, harrassment, and punitive actions. In general, the Army leader learns that waiting until subordinates behave in productive ways and then rewarding them, leads to long-term positive consequences far in excess of short-term consequences resulting from telling them what to do and threatening them with punishment should they fail to do it immediately.

The third general requirement of the Performance Manager is that he be able to design an appropriately reinforcing work environment for subordinates. In general, he has to know how to:

- √identify, in behavioral terms, what performance or target behaviors need improvement and what the standards are (this step follows directly from mutual goal and objectives setting);
- √establish and record baselines from which to measure performance change;
- √provide, for a period of time, frequent positive reinforcement and continuous feedback to subordinates for approximations to established standards for each goal and objective;

√provide, for a subsequent period of time, infrequent positive reinforcement and require that subordinates provide themselves with continuous feedback by keeping daily records;

√maintain, once standards are being met or exceeded, appropriate behavior by very occasional positive reinforcement and by making sure continuous feedback is sustained.

Since the principles involved are few in number and relatively straightforward, they are easier to learn to apply than are other motivational schemes. Any leader at any level can be trained to use these techniques (6).

Nonetheless, it is necessary to consider the misinformation and false beliefs about human behavior that Army leaders are likely to bring with them to the training situation. First, many leaders are likely to believe that the alternatives for motivating others lie between permissiveness on the one hand and strictness on the other. Regardless of which alternative they favor, they must be dissuaded from conceptualizing the problem in such simplistic terms.

Permissiveness refers to non-contingent reinforcement; the individual is rewarded no matter what he does. Consequently, inappropriate behaviors are as likely to be reinforced as appropriate ones. Strictness refers to practices that are solely punitive. Such practices not only introduce aversive stimuli into the environment, they also fail to reward appropriate behaviors. Neither permissiveness nor strictness provide an appropriate basis for formulating effective performance management practices, either singly or in some kind of mixture. These terms are simply irrelevant to the issue.

Second, some leaders are likely to believe that motivation and discipline are concerned with attitudes and traits. Rather than attempting to change such gross characteristics as personality traits or attitudes, performance management techniques chip away at discrete behaviors, one after another, until a desirable pattern of change has been effected. Attitudes change as a by-product.

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